



CORPORATION OF GLASGOW

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**REPORT**

OF THE

Medical Officer of Health  
City of Glasgow

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**1945**

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ORDERED BY THE COMMITTEE ON HEALTH TO BE PRINTED



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## PREFACE.

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During the war years the Annual Report had of necessity to be somewhat abridged and while the present report has not achieved the pre-war size it has been expanded to a certain extent in order to re-introduce various records of the work of the Department which had to be omitted from the abridged reports of 1939 to 1944.

But for the war a census would have been taken in 1941. Even before then there was some doubt as to the accuracy of the estimates of the population because these estimates are largely based on the average number of persons per house, a figure which is known to have been gradually reduced. In view of the important bearing which estimates of the population have on vital statistics, housing, etc., the basis on which the present estimate is made is given in some detail in the introductory section.

The present annual report deals with a year which, although the first of peace, still retains many of the war-time restrictions. Nevertheless, the health of the community remains remarkably good, and as is noted elsewhere in the report on the medical inspection of school children the heights and weights of the children continue to improve. The death rate remains uniformly good at 13.9 despite the gradual ageing of the population.

Probably the best index is the infant mortality rate, for it reflects not only the conditions affecting child life but also the general health of the adult. The infant mortality rate at 68 is the lowest on record, the previous lowest being 82 in 1943, while the maternal mortality rate is down to 3.47, also a low record. These low rates have no doubt been considerably influenced by all the extensions of the child welfare scheme, the priority milk scheme, free or at reduced cost, and the scheme for the supply of vitamins. The progress made has been most encouraging.

Housing still remains one of the most difficult problems, for, apart from the destruction of houses by enemy action, practically no building has taken place during the war. On account of depreciation alone over 3,000 houses are required annually in the City. When to this number is added those required to mitigate overcrowding, to replace worn-out houses not dealt with in previous years, and an allowance is made for the increased standards of living now rightly demanded by the population, a position is created which will take years to remedy.

With regard to infectious diseases, the most important item is the progress of the scheme for immunisation against diphtheria. The improvement effected is illustrated in diagram form and shows that a considerable reduction in the mortality from the disease has occurred within recent years. All of the 33 deaths which occurred were amongst non-immunised children, 25 of whom were under 5 years of age.

Although a considerable number of contacts of cases of smallpox arrived in the City during the course of the year no cases of this disease developed here.

The mortality from all infectious diseases was the lowest on record.

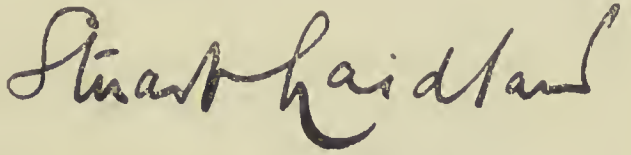
The problem of tuberculosis, which grew in magnitude during the war years, is still with us. The number of cases of this disease arising annually, while now showing a tendency to fall, is still far above pre-war level. The difficulties of dealing with this increased number of cases is further complicated by the great scarcity of nurses and the poor housing conditions.

Cases of venereal disease still remain at the same high figure as during the war. Fortunately, however, the problem of dealing with the large number of cases coming to the dispensaries has been, to a certain extent, eased by improved methods of treatment, especially in respect to gonorrhoea.

In the realm of general sanitation it was not possible during the war to include in these reports a record of the work of the Sanitary Inspectors. This has now been rectified to a certain extent by the insertion of a summarised record of the statistics in the Appendix to this Report, and also in the introductory memorandum in Section X dealing with General Sanitation.

Dr. Thomas Anderson, formerly Physician Superintendent of Knightswood Hospital, has supplied some interesting epidemiological information which is included in the Fever Hospital section of the Report.

In presenting this Report I am indebted to Mr. Wm. M'Kean, Assistant Secretary of the Department, who has been responsible for the Statistical Sections of the Report and the collation and arranging of the remaining parts.

A handwritten signature in cursive script, reading "Stuart Haidland". The letters are dark and fluid, with a prominent loop at the end of the last name.

*Medical Officer of Health.*

# CONTENTS

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## PREFACE.

SECTION.	PART I.	PAGE
I. POPULATION—		
Ward Populations, Inhabited Houses, etc. ... ..		1
Temperature and Rainfall (Meteorological Observations)		6
Health Propaganda ... ..		7
Blind Persons Acts ... ..		8
Legislation ... ..		14
II. VITAL STATISTICS—		
Summary ... ..		17
Births and Deaths ... ..		17
Causes of Death ... ..		19
Deaths from Cancer ... ..		22
III. MATERNITY AND CHILD WELFARE—		
Maternity and Child Welfare Services ... ..		25
Infant Mortality ... ..		26
Notification of Still Births ... ..		28
Child Welfare Scheme ... ..		30
Supply of Milk to Mothers and Children ... ..		33
Ante-Natal Consultations ... ..		33
Dental Treatment for Expectant Mothers ... ..		35
Maternal Mortality ... ..		35
Artificial Light Treatment ... ..		36
Infant Visitation ... ..		36
Day Nurseries ... ..		38
Home Help Scheme ... ..		40
Midwives (Scotland) Acts ... ..		42
Municipal Midwives ... ..		42
Nursing Homes Acts ... ..		43
Ophthalmia Neonatorum and Results of Treatment ...		43
Puerperal Fever and Puerperal Pyrexia ... ..		44

SECTION.	PAGE
IV. INFECTIOUS AND OTHER DISEASES—	
Smallpox and Vaccination	46
Typhus Fever	47
Enterica Infections, Dysentery, and Scarlet Fever	48
Diphtheria and Immunisation	50
Erysipelas	54
Diseases of the Central Nervous System...	55
Measles	57
Whooping Cough	58
Chickenpox	59
Diarrhoea and Enteritis	59
Infective Jaundice	60
Scabies	61
Trachoma and Rabies	61
<i>Respiratory Diseases—</i>	
Pneumonia and Influenza	64
Pulmonary and Non-Pulmonary Tuberculosis	66
Baird Street Actino-therapy Clinic	72
Mass Radiography Unit	74
X-ray Work	75
<i>Venereal Disease—</i>	
Treatment	75
Work of the Centres	76
V. WORK OF PORT HEALTH AUTHORITY—	
Smallpox	88
Hygiene in Crews' Spaces	91
Destruction of Rats and Mice	93
Fumigation of Ships...	94
Anthrax	94
Food Inspection, "Sweat" Damage, etc....	95
Port Sanitary Regulations	99
VI. HOUSING—	
Survey of Housing Conditions	102
Decrowding Operations	103
Slum Clearance and Rehousing	104
Conditions in Slum Clearance Rehousing Schemes	104
Bug Infestation	106

SECTION.	PAGE.
VII. BACTERIOLOGICAL LABORATORY—	
Fluorescent Microscopy ... ..	108
Diphtheria ... ..	109
Dysentery and Food Poisoning ... ..	109
Gonorrhœa ... ..	110
Infective Hepatitis ... ..	110
Leptospirosis ... ..	111
Milk Supply ... ..	111
Water and Other Examinations ... ..	112
VIII. FOOD—	
Food Poisoning ... ..	114
Operations under Food and Drugs (Adulteration) Act, 1928 ... ..	117
Milk (Special Designation) Orders... ..	119
Tubercle Bacilli, etc., in Milk ... ..	122
Supply of Milk to School Children ... ..	124
Inspection of Food Premises, Dairies, Byres, etc. ... ..	126
Prosecutions ... ..	128
Operations under the Various Acts, 1939 to 1945 ... ..	131
IX. AIR PURIFICATION—	
Summary of Work of Department ... ..	132
Soot Collecting Gauges ... ..	134
Classes on Boilerhouse Practice ... ..	135
X. GENERAL SANITARY ADMINISTRATION—	
General Review ... ..	136
Offensive Trades ... ..	139
Disinfection ... ..	140
General Nuisances ... ..	140
Sub-letting ... ..	143
Verminous Children ... ..	143
Linewashing and Cleansing of Stairs, etc. ... ..	145
Rats and Insect Pests ... ..	150



TABLE.	PAGE
APPENDIX TABLES.	
I. Estimated Population in Municipal Wards, Acreage, etc.	152
II. Inhabited and Unoccupied Houses in Municipal Wards	153
III. Linings Granted by Dean of Guild Court ... ..	154
IV. Abstract of Meteorological Observations at Glasgow ...	154
V. Births and Birth-rates and Illegitimate Births in Wards	155
VI. Deaths and Death-rates in Wards ... ..	156
VII. Outward and Inward Transfer Deaths ... ..	157
VIII. Deaths and Death-rates from different Diseases ...	158
IXA. Sex and Age Distribution of Deaths (Males) ... ..	160
IXB. Do. do. (Females) ... ..	161
X. Deaths occurring in Institutions, Nursing Homes, etc.	159
XI. Deaths under 1 year and Death-rate per 1,000 Births	162
XII. Infant Deaths at Given Ages and from certain causes	163
XIII. Abstract of Notifications under Notification of Births Act, 1907, and results of Visits ... ..	164
XIV. Births Notified—Medically and not Medically attended	164
XV. Cases of Infectious Disease Registered and Number Treated in Hospital ... ..	165
XVI. Cases of Infectious Disease Registered in Months ...	166
XVII. Operations of Sanitary Section ... ..	167
XVIII. Population ; Births and Deaths ; Birth-rates and Death-rates per 1,000 ; also Deaths under 1 year, and Death-rates per 1,000 Births since 1890 ...	176

## PART II.

## FEVER HOSPITALS AND TUBERCULOSIS.

Work of the Fever Hospitals	...	...	...	...	...	177
Streptococcal Infections, etc.	...	...	...	...	...	177
Age and Sex Distribution of Cases dismissed from Hospitals	...	...	...	...	...	187
Robroyston Hospital	...	...	...	...	...	188
Mearnskirck Hospital	...	...	...	...	...	192

## PART III.

## GENERAL HOSPITALS AND OUTDOOR MEDICAL SERVICES.

Outdoor Medical Services	...	...	...	...	...	197
Stobhill, Eastern, and Western District Hospital	...	...	...	...	...	199
Southern General Hospital	...	...	...	...	...	200
Obstetrical Section	...	...	...	...	...	201
Diabetes—Supply of Insulin	...	...	...	...	...	202

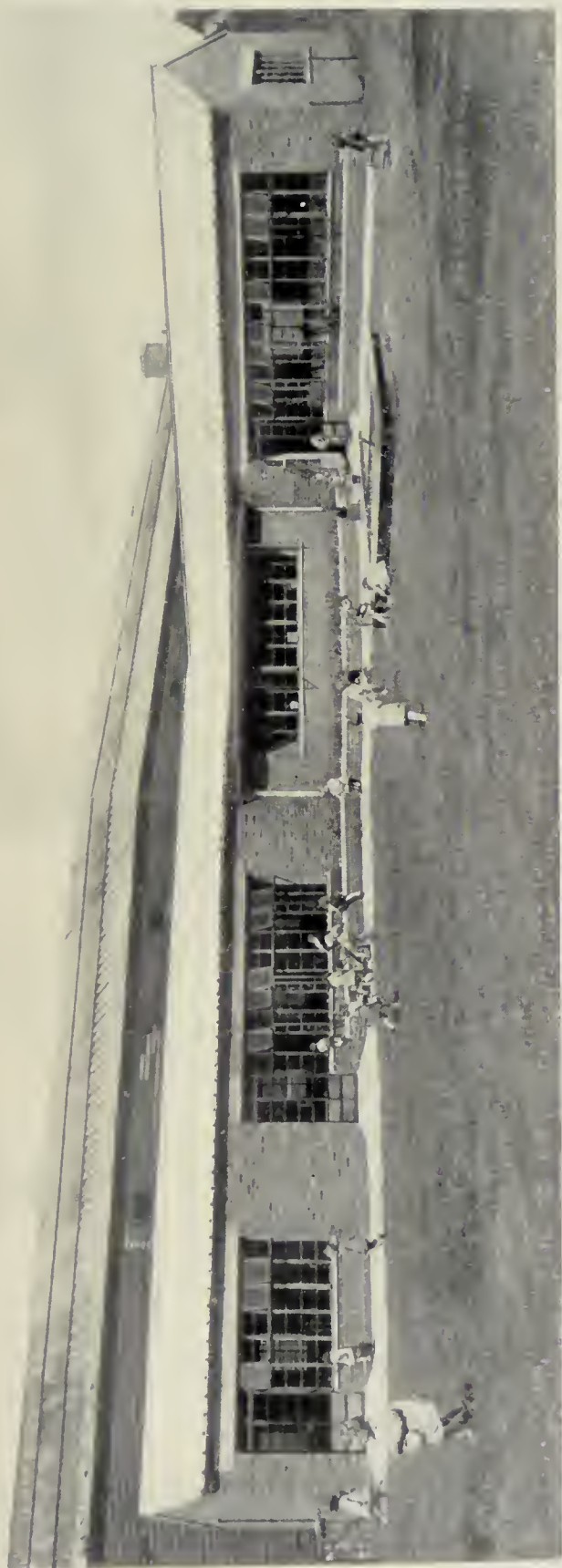
## PART IV.

## MENTAL SERVICES.

General Review	...	...	...	...	...	205
Certified Institutions	...	...	...	...	...	210
Psychiatric Units in General Hospitals	...	...	...	...	...	211
Forms of Mental Disorder admitted	...	...	...	...	...	215

## DIAGRAMS.

Newlands Day Nursery	...	...	...	...	( <i>frontispiece</i> )
Population Pyramid	...	...	...	...	3
Infant Mortality Rates and Causes since 1910	...	...	...	...	24
Day Nursery Plan—Holmlea Day Nursery	...	...	...	...	39
Diphtheria Cases and Mortality	...	...	...	...	53
Death-rates from Respiratory Diseases, 1914-45	...	...	...	...	65
Broomielaw V.D. Clinic	...	...	...	...	83
Gorbals Annexe—Clinic for Women	...	...	...	...	84



NEWLANDS DAY NURSERY.



# REPORT

OF THE  
 Medical Officer of Health  
 FOR THE YEAR  
 1945

PART I  
SECTION I

POPULATION, Etc.

Although printed Annual Reports were not called for by the Department of Health for Scotland, these were published for the city during the war years in an abridged form. The same pattern has largely been adopted for 1945, except that some of the former statistical tables which had been omitted during the war years have again been incorporated in the appendix.

The estimated population of the city during the war was retained at 1,050,000, and this has again been taken for the calculation of rates for 1945. This is considerably in excess of the estimate of 993,700 adopted by the Registrar-General, whose estimates during the past five years have been considerably below the pre-war figures because of the evacuation of children and many households due to enemy bombing, and the conscription of both men and women for military purposes.

It is difficult to equate all the factors which affect the population, especially of a large city, but it is thought that the estimate of 1,050,000 may not be so far removed from the actual population in view of the pressure on housing accommodation, for although quite a number of houses have been demolished by bombing or for other reasons, a considerable number of large and empty houses have now been broken up into one or two apartments to provide accommodation for the working classes. This estimate is to a certain extent substantiated by the following information :—

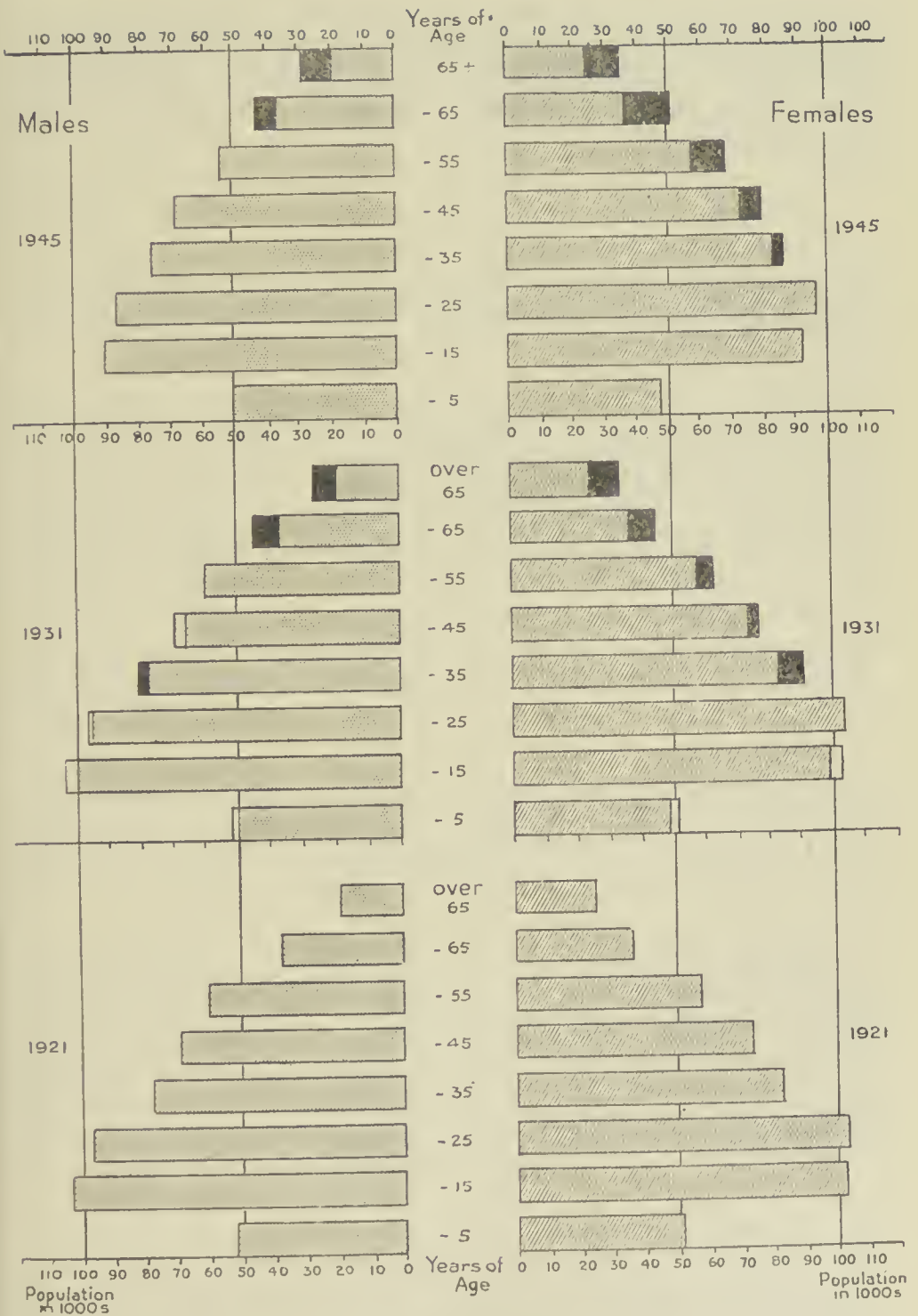
Number of Electorate	745,000	
<i>Less</i> Men and Women on Service	70,000	
	675,000	
Estimated population under 5 years of age		97,000
Estimated population school children from 5-15 years		185,000
Estimated population between 15 and 21 years	100,000	
<i>Less</i> conscripted for military service	20,000	
	80,000	
		1,037,000

With the lower infant mortality rates of recent years and the arrested decline in the birth rate, it is estimated that the population under school age, i.e.—5 years, is approximately 95,000; over the school age period, 5-15 years, estimated on the number of births from 1931 onwards less the deaths, would give a total population for these ages of approximately 185,000. As no census has been made since 1931, it may be of interest to reconstruct the estimated present population on an age constitution basis in view of the prominence which has been given in recent years to the increasing number of persons surviving to old age.

Ages.	Census.		Census.	Estimate.
		1921*	1931	1945
-5 ...	M.	51,875	49,809	49,000
	F.	51,142	49,168	48,000
-15 ...	M.	102,627	99,776	93,000
	F.	102,738	98,843	92,000
-25 ...	M.	96,121	94,959	84,000
	F.	104,406	103,714	94,000
-35 ...	M.	77,516	81,385	74,000
	F.	88,353	92,610	85,000
-45 ...	M.	69,462	66,647	68,500
	F.	73,668	76,391	77,000
-55 ...	M.	60,438	59,831	57,500
	F.	56,946	64,065	66,250
-65 ...	M.	36,012	45,595	47,500
	F.	35,737	45,078	49,250
+65 ...	M.	19,220	26,473	28,000
	F.	25,266	34,117	37,000
		<u>1,051,527</u>	<u>1,088,461</u>	<u>1,050,000</u>

\* Adjusted for extension of boundary, May, 1926.

The estimate of the population below 15 years is known fairly accurately. As the age increases the estimates become more problematical. Allowance has been made for a total of 10,000 fatal casualties in the war on the basis of the proportion the population of the city bears to the total for Britain, and consequently appropriate deductions have been made between the ages of 20 and 45 years. The 1931 census showed the actual changes which took place in the age constitution of the population resulting from casualties in the war of 1914-18. For instance, the difference between the male and female population "—45" years of age at the 1921 census was approximately 4,000, whereas the difference 10 years later was nearly 10,000.



GLASGOW—POPULATION PYRAMID.

1921, 1931, 1945.

Estimates of the number of persons surviving at older ages have been made by projecting forward the populations 10 years previously, but keeping in mind the lowering of the birth rate towards the end of the last century and the reduction in mortality which has taken place in recent years.

These figures are given in the population pyramid on the previous page, showing diagrammatically the contraction of the population at younger ages and the higher proportion at older ages, especially from 55 years upwards, more particularly compared with the population after the last war.

*Ward Population.*—The distribution of the population throughout the Municipal Wards of the city is shown in Table I in the Appendix. The ward with the largest population is now Pollokshields with an estimated number of 50,906, whereas in the 1921 census the population was only 20,549. In Ruchill ward the estimate is 49,707, which compares with 26,645 at the 1921 census. The comparative figures for Shettleston are 44,713 and 32,288, and for Provan, 43,524 and 30,802. These are the wards with the highest populations and much of the increase is due to the building of new housing schemes in these districts. The largest relative increase has taken place in Cathcart ward, where the population has more than doubled during this period, the present estimate being 29,210 against 14,226 in 1921. Apart from Exchange and Blythswood which are largely occupied by business premises, the smallest populations are 17,155 in Langside and 17,359 in Camphill, figures which are little different from the census of 1921.

*Institutional Population.*—For the purposes of the estimated population a special census is made in June of each year of the persons resident in hospitals, hotels, lodging-houses, etc., throughout the city. The total as at 30th June, 1945, was 33,102, which is not much in excess of the pre-war figure, namely 32,549. This difference is more than accounted for by the larger number of persons resident in hotels, for the population in institutions in Blythswood district where most of these are situated is now 3,549 against 2,513 in 1938. The ward with the greatest institutional population, however, is Springburn, 4,166, because of the situation in that ward of Stobhill Hospital with 2,059 inmates. Exchange ward had 2,502 institutional residents, mostly in hotels on the one hand and common lodging-houses on the other. The shipping population, 1,479, is always taken as that of the last census.



The acreage of the city, 39,725, remains the same as it was before the war. The distribution of the acreage is shown in Table I in the Appendix. The wards with large acreages such as Provan, Springburn, Ruchill, Maryhill, Whiteinch, Pollokshields, Pollokshaws, etc., are those on the periphery of the city with large unbuilt areas which were annexed in 1938.

*Density.*—The number of persons per acre in each Municipal Ward has again been introduced into Table I in the Appendix, but without an intimate knowledge of the situation of parks, open spaces, railways, etc., the figures for certain wards would be misleading. For example, in Calton ward almost half the acreage is taken up by Glasgow Green so that the real density instead of being 73 would be nearer 150. Other wards such as Provan, Maryhill, Pollokshields, Pollokshaws and Cathcart on the periphery of the city had large areas added to them by the extension of 1938, and the densities given are therefore very low.

On the other hand, Woodside with no open spaces has the highest density of 168, followed by Gorbals, 150; Townhead, 135; and North Kelvin, 132.

*Occupied and Empty Houses.*—In Table II of the Appendix are given the numbers of occupied houses compared with the figures for the previous year. The total, 289,028, is an adjusted figure given by the City Assessor and includes inhabitant occupiers, i.e., caretakers of buildings, tradesmen in institutions, etc., and shops occupied as houses. The increase from the previous year is 248 and the differences in the Municipal Wards are relatively small, except for Pollokshields with an increase of 314 and Mile-end, 116 because of the completion of a number of houses, the construction of which was delayed during the war restrictions. Decreases shown in some instances result from the cessation of occupancy of quite a number of large houses which were formerly let as furnished flats or single apartments.

The total number of unoccupied houses, 348, is only 4 more than the number returned for the previous year. Many of these are large houses with high rentals, for, as shown in Appendix Table II, the districts in which these houses are situated have the largest number of empty houses, e.g., Kelvinside, 70; Pollokshields, 28; and North Kelvin and Whiteinch with 22 each.

The number of occupied and empty houses according to size is given in the following summary and compared with the preceding year :—

	Occupied.		Empty	
	1945	1944	1945	1944
One-apartment ...	36,966	37,165	148	154
Two-apartments ...	110,932	111,134	41	85
Three-apartments ...	79,610	79,302	27	33
Four-apartments ...	38,182	37,820	23	24
Five-apartments and over	23,338	23,359	109	68
	<u>289,028</u>	<u>288,780</u>	<u>348</u>	<u>344</u>

*Dean of Guild Linings.*—The number of linings granted by the Dean of Guild Court during the year to 31st August is given in Appendix Table III. The linings granted for the erection of houses numbered 178. Of this total 79 were for three-apartment houses and 94 in respect of four-apartment houses, most of which are situated in Knightswood district where a considerable number of bombed houses were reconstructed.

#### METEOROLOGY.

The weather conditions during the year were comparatively good, and although the spring was late and rather cold with severe frosts which badly damaged the fruit crop, the weather remained mild in the last months of the year, and this was beneficial to the vital statistics of the city. The mean temperatures were generally above the average, particularly in March and October, so that the mean average over the year was 48·6° against 47·3° for the preceding year, and the highest temperature was 81° in August, while the lowest was 11° in January. The average mean temperature for the decennium 1935-44 was 47·2°. Severe weather conditions were mostly confined to January, during which month the only heavy snow fall of the year was experienced, followed by an immediate and rapid thaw. Fog was present on a few occasions, but was neither dense nor persistent.

Rainfall was recorded on 233 days against 231 in 1944, but the total rainfall was 43·6" against 44·4". This precipitation is above the average of 40·8" during the 10 years 1935-44. The heaviest rainfall occurred in February when precipitation was recorded on 27 days and a total of 5·74". Otherwise the rainfall was pretty evenly distributed throughout the year, with the exception of November when the amount of rainfall was 0·66".

The hours of bright sunshine recorded during the year numbered 1,199, which was appreciably higher than the 953 for 1944, one of the lowest on record. The average of the preceding 10 years was 1,104. This favourable return was contributed to by the high record of sunshine during April and September.

### HEALTH PROPAGANDA.

*Central Health Lectures.*—Owing to the late date of authorisation of booking accommodation, the Central Course had to be confined to four meetings, mostly on Sunday afternoons, for the cinema house was not available in the evenings, which apparently is a more suitable time for the public. The meetings took the form of "Health Talks" with the intention of reinforcing the knowledge imparted by selected films exhibited.

1946.	Films.	Commentator.	Audience
Jan. 6	The Need for Nurses ... ..	Dr. James Dunlop ...	} 600
	"Student Nurse" and "Tuberculosis" ... ..	Dr. Stuart I. A. Laidlaw	
Feb. 3	"Teeth" ... ..	Mr. James A. Gale ...	} 650
	"Ear Diseases and Defects" ... ..	Dr. R. J. Watson ...	
Mar. 17	"Eye Diseases and Defects" ... ..	Dr. John Marshall ...	} 500
	"Britain's Youth" ... ..	Mr. D. M. McLachlin...	
Apr. 7	"Principles of Good Diet" ... ..	Dr. Arthur Anderson	} 450
	"Blood Transfusion" ... ..	Mrs. G. S. W. Peat ...	

*District Health Report.*—In addition experimental propaganda work was carried out in four districts of the city, when the following films were shown :—

- (1) "ABCD of Health";
- (2) "Student Nurse"; and
- (3) "Highland Medical Service."

Commentaries were given as follows :—

March 15	... Partick Clinic	... ..	Dr. Clutterbuck.
" 19	... Pearce Institute, Govan	... ..	Dr. Miller.
" 21	... Possilpark Clinic	... ..	Dr. M'Millan.
" 26	... Dixon Hall, Govanhill	... ..	Mr. M'Kean.

Arrangements were made for members of the medical staff of the Department to give lectures, talks and tutorials on approximately 350 occasions. The Health Visitors also gave addresses and demonstrations, mostly to women in the services.

## BLIND PERSONS ACTS, 1920-1938.

During the war years only skeleton reports have been given on the operation of the Regional Certifying Clinic but in this issue, in addition to the report on the year 1945, summarised tables giving the details of the work of the clinic during the past six years are included.

*Work of the Regional Clinic*—During the year 1945, 434 persons were examined for the first time of whom 340 were examined at the clinic and 94 at home. In addition 79 applicants were re-examined making for the year a total of 512 cases examined. This figure is still very much less than the number examined at the Centre in pre-war years as will be seen from the following table :—

Year.	Certified Blind.			Rejected.			Re-exami- nations.	Grand Total.
	Males.	Females.	Total.	Males.	Females.	Total.		
1938 ...	271	232	503	176	123	299	158	960
1939 ...	190	211	401	146	116	262	141	804
1940 ...	146	146	292	104	81	185	151	628
1941 ...	171	146	317	81	59	140	121	578
1942 ...	177	187	364	71	62	133	105	602
1943 ...	140	163	303	56	48	104	88	495
1944 ...	154	156	310	78	37	115	97	522
1945 ...	158	180	338	50	46	96	78	512

Of the 434 cases examined for the first time, 77·9 per cent. were certified blind within the meaning of the Act. The work of the clinic since its inauguration in 1939 is summarised in the following statement in which the figures for the years previous to 1945 are given in quinquennial periods :—

Years	Number Examined.	Certified Blind.		Number Re-examined.
		Number.	Percentage.	
Years 1929-34 ...	4,114	2,495	60·7	658
Years 1935-39 ...	3,951	2,561	64·8	730
Years 1940-44 ...	2,363	1,586	67·1	562
1945 ...	434	338	77·9	78
Totals ...	10,862	6,980	64·3	2,028

*Sources of Candidates.*—The source of candidates is shown as follows :—

Applicants for Blind Pension ...	104
Applicants for increased Public Assistance ...	244
Applicants for Technical Training ...	12
Applicants for Free Tramway Pass ...	7
Applicants referred by Mission to Outdoor Blind ...	60
Applicants for Education ...	7
Wireless Licence ...	—
Unclassified ...	—

The largest number was examined for increased Public Assistance but a substantial proportion attended in connection with application for Blind Pensions.

AGE AND SEX INCIDENCE OF APPLICANTS CLAIMING TO BE BLIND  
EXAMINED AT THE CERTIFYING CLINIC DURING THE YEAR 1945.

Age.	Certified.			Rejected.		
	Males.	Females.	Total.	Males.	Females.	Total.
—1	—	3	3	1	1	2
1-4	—	3	3	1	—	1
5-15	5	2	7	1	—	1
16-29	7	5	12	2	2	4
30-39	5	2	7	8	3	11
40-49	10	15	25	3	4	7
50-59	22	21	43	1	3	4
60-69	35	25	60	11	8	19
70+	74	107	181	23	25	48
	158	180	338	50	46	96

From the above table it will be seen that 81·8 per cent. of the applicants were over 50 years of age and 52·8 per cent. were 70 and over. In 1945 the females outnumbered the males, the reverse of what has occurred during previous years.

The preponderance of cases of blindness in the later years of life is also illustrated by the following tables showing the age incidence of the blind persons on the register for the area of the Joint Committee for the Blind for Glasgow and South-West Scotland and for Glasgow, respectively, for the year 1945-46. The figures have been supplied by the General Manager of the Royal Glasgow Asylum for the Blind.

AGE INCIDENCE OF PERSONS ON THE BLIND REGISTER.

(a) *Glasgow and South-West Scotland—*

Age Group.	Male.	Female.	Total.	Relative Percentage.
0-2	1	—	1	—
3-4	2	3	5	0·1
5-15	31	28	59	1·3
16-17	13	10	23	0·5
18-29	90	80	170	3·8
30-39	192	149	341	7·6
40-49	312	212	524	11·7
50-69	948	775	1,723	38·5
70+	732	896	1,628	36·5
Total	2,321	2,153	4,474	100·0

(b) *Glasgow Only—*

Age Group.	Male.	Female.	Total.	Relative Percentage.
0-2	—	—	—	—
3-4	2	1	3	0·1
5-15	22	9	31	1·3
16-17	5	4	9	0·4
18-29	46	40	86	3·7
30-39	100	84	184	7·9
40-49	198	119	317	13·5
50-69	522	416	938	40·1
70+	326	445	771	33·0
Total	1,221	1,118	2,339	100·0

The relative age incidence of persons certified blind in the years from 1938-45 is shown in the following table where it will be seen that during the war years the percentage of cases under the age of 15 has increased appreciably and that there is a marked preponderance of cases over 75 years of age :—

STATEMENT SHOWING PERCENTAGE AGE INCIDENCE OF PERSONS CERTIFIED BLIND DURING THE YEARS 1938-45.

Age.	...	...	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.
—15	...	...	1.4	1.5	1.4	1.0	2.2	4.0	2.7	3.8
—45	...	...	19.5	15.9	15.5	15.5	8.4	12.9	18.6	14.2
—75	...	...	66.5	66.7	64.1	55.4	57.7	52.3	49.9	51.2
75+	...	...	12.6	15.9	19.0	28.1	31.7	30.8	28.8	30.8
Total	...	...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE SHOWING THE ALLOCATION OF THE APPLICANTS EXAMINED DURING 1945 AT THE CERTIFYING CLINIC AMONG THE LOCAL AUTHORITIES COMPOSING THE JOINT COMMITTEE FOR THE BLIND FOR GLASGOW AND THE SOUTH-WEST OF SCOTLAND.

	Certified.			Rejected.		
	Males.	Females.	Total.	Males.	Females.	Total.
Glasgow ... ..	77	88	165	29	22	51
Airdrie ... ..	2	2	4	1	2	3
Coatbridge ... ..	4	5	9	4	2	6
Hamilton ... ..	1	4	5	1	2	3
Motherwell and Wishaw	3	2	5	1	—	1
Rutherglen ... ..	1	1	2	1	—	1
Other Lanarkshire ...	14	15	29	6	3	9
Greenock ... ..	11	12	23	2	3	5
Paisley ... ..	5	8	13	2	3	5
Port-Glasgow ... ..	2	1	3	—	—	—
Other Renfrewshire ...	2	7	9	—	2	2
Dumbarton ... ..	2	2	4	—	1	1
Clydebank ... ..	4	5	9	1	1	2
Other Dunbartonshire ...	6	8	14	—	1	1
Falkirk ... ..	1	—	1	—	—	—
Stirling ... ..	3	—	3	—	—	—
Other Stirlingshire ...	4	2	6	—	1	1
Ayr ... ..	5	1	6	1	—	1
Kilmarnock ... ..	2	5	7	1	—	1
Other Ayrshire ... ..	7	5	12	—	3	3
Argyll County ... ..	2	6	8	—	—	—
Bute County ... ..	—	—	—	—	—	—
Dumfries Burgh ... ..	—	1	1	—	—	—
Not stated ... ..	—	—	—	—	—	—
Total ... ..	158	180	338	50	46	96

Of the applicants examined, 216 or 49.8 per cent. resided in Glasgow, compared with the corresponding percentage of 52.1 during the preceding year.

In 1945 78 cases were re-examined. The alterations in the decisions of the clinic as a result of re-examination were as follows :—

(a) Certified blind on first examination and decision unaltered on re-examination ... ..	11
(b) Certified blind on first examination and decision reversed on re-examination ... ..	2
(c) Certified not blind on first examination and decision unaltered on re-examination ... ..	16
(d) Certified not blind on first examination and decision reversed on re-examination ... ..	26
(e) Certified blind on second examination and decision unaltered on re-examination ... ..	3
(f) Certified blind on second examination and decision reversed on re-examination ... ..	—
(g) Certified not blind on second examination and decision unaltered on re-examination ... ..	6
(h) Certified not blind on second examination and decision reversed on re-examination ... ..	14
Total ... ..	78

*Follow-up of Defaulters.*—During the past few years an attempt has been made to follow up defaulters examined at the Regional Blind Clinic whose vision was considered by the examining surgeons as likely to benefit from further treatment. The scheme for after-care has been made possible by the co-operation of the Mission to the Outdoor Blind for Glasgow and the South-West of Scotland. The home teachers make special enquiries twice yearly regarding such patients and report progress. Where operative or other treatment has been completed, the patient is summoned to the clinic for examination and the improvement or otherwise noted, while the teacher endeavours to persuade the defaulter to attend for advice. The results as regards 766 cases certified blind and now fully disposed of are shown as follows :—

TREATMENT CARRIED OUT.

Treatment Recommended.	No. of Cases.	Still Blind.	Not now Blind.	Total.	Dead.	Unwilling.	Unfit.	Others.
Surgical ...	697	57	64	121	113	176	166	121
Medical ...	69	19	7	26	11	18	—	14
Total ...	766	76	71	147	124	194	166	135
Percentage ...	...	...	...	19.2	16.2	25.2	21.8	17.6

STATISTICS FOR THE YEARS 1939-1944.

In the following section are included three tables showing the statistics for the years 1939-44. In Table I—the age and sex incidence of applicants—the figures for the six years have been combined but in Tables II and III it has been possible to give the statistics for the individual years.

TABLE I.

## AGE AND SEX INCIDENCE OF APPLICANTS EXAMINED AT THE CERTIFYING CLINIC DURING THE YEARS 1939-44.

Age.	Certified.			Rejected.		
	Males.	Females.	Total.	Males.	Females.	Total.
-1 ... ..	2	1	3	—	1	1
1-4 ... ..	5	10	15	2	2	4
5-15 ... ..	16	7	23	16	6	22
16-29 ... ..	42	34	76	26	27	53
30-39 ... ..	63	42	105	33	21	54
40-49 ... ..	91	71	162	37	39	76
50-59 ... ..	149	108	257	81	68	149
60-69 ... ..	248	239	487	178	112	290
70+ ... ..	360	498	858	163	127	290
Not stated ... ..	1	—	1	—	—	—
Totals ... ..	977	1,010	1,987	536	403	939

It would seem that 2,331 of the applicants or 79·7 per cent. were over 50 years of age and 39·2 per cent. over 70 years of age.

The number of applicants examined during the years 1939-44 at the Certifying Clinic are shown in Table V according to the domicile.

TABLE II.

## STATEMENT SHOWING THE ALLOCATION OF THE APPLICANTS EXAMINED DURING THE YEARS 1939-44 AT THE CERTIFYING CLINIC AMONG THE LOCAL AUTHORITIES COMPOSING THE JOINT COMMITTEE FOR THE BLIND FOR GLASGOW AND THE SOUTH-WEST OF SCOTLAND.

	1939.	1940.	1941.	1942.	1943.	1944.	Percentage of Grand		
							Total.	Total.	
Glasgow ... ..	356	256	246	291	209	212	1,570	53·7	
Airdrie ... ..	9	13	8	8	6	11	55	1·9	
Coatbridge ... ..	24	15	9	8	9	9	74	2·5	
Hamilton ... ..	22	8	9	15	8	13	75	2·6	
Motherwell and Wishaw	12	5	7	3	7	8	42	1·4	
Rutherglen ... ..	11	2	3	9	6	5	36	1·2	
Other Lanarkshire ... ..	57	53	51	32	41	48	282	9·6	
Greenock ... ..	26	11	17	8	10	7	79	2·7	
Paisley ... ..	11	11	7	12	10	13	64	2·2	
Port Glasgow ... ..	14	7	3	1	6	7	38	1·3	
Other Renfrewshire ... ..	9	11	11	9	10	16	66	2·3	
Dumbarton ... ..	7	3	10	6	6	2	34	1·2	
Clydebank ... ..	5	9	3	7	6	7	37	1·3	
Other Dumbartonshire	20	12	11	14	12	10	79	2·7	
Falkirk ... ..	6	4	1	6	6	3	26	0·9	
Stirling ... ..	1	2	2	—	—	1	6	0·2	
Other Stirlingshire ... ..	12	7	11	13	13	6	62	2·1	
Ayr ... ..	8	10	6	6	1	7	38	1·3	
Kilmarnock ... ..	8	3	2	10	3	7	33	1·1	
Other Ayrshire ... ..	27	18	31	20	27	23	146	5·0	
Argyll County ... ..	9	13	5	12	10	6	55	1·9	
Bute County ... ..	1	—	1	2	—	2	6	0·2	
Dumfries Burgh ... ..	8	4	3	5	1	1	22	0·7	
Not stated ... ..	—	—	—	—	—	1	1	—	
Total ... ..	663	477	457	497	407	425			
	Grand Total						...	2,926	100·0



Of the 2,926 applicants examined during the six years, 1,570 or 53·7 per cent. resided in Glasgow.

TABLE III.  
CAUSES OF BLINDNESS.

The causes of blindness of the 1,987 accepted cases are shown in the following table :—

*Congenital and Undetermined—*

	1939	1940	1941	1942	1943	1944	1945
Congenital anomalies (64) and developmental defects (51)	24	11	23	13	29	15	13
Tumours of Globe and Orbit ...	—	—	—	—	—	1	—
Myopia ... ..	66	44	27	42	31	33	30
Other errors of refraction ...	—	—	—	—	—	—	—
Glaucoma, primary ... ..	50	27	49	46	44	40	45
Cataract, primary ... ..	88	96	87	134	99	95	121
Other primary ocular defects (primary detachment) ...	6	3	2	5	3	4	1

*Infectious and Toxic—*

(a) Exogenous :

Ophthalmia neonatorum	3	7	7	6	3	2	2
Trachoma ... ..	6	4	3	2	—	1	—
Local septic infection of coats of eye ... ..	—	2	4	4	6	6	2
Other local specific infections (gonorrhoea) (mycosis) ... ..	—	—	—	—	—	—	1

(b) Endogenous :

Gonorrhoea ... ..	—	—	1	—	—	—	—
Syphilis, congenital ...	11	7	2	5	8	3	6
Syphilis, acquired, including not definitely congenital	12	7	13	4	7	2	3
Specific fevers (smallpox) (measles) ... ..	1	3	1	1	1	1	2
Meningitis (non-tuberculous), including cerebro-spinal fever ... ..	2	2	—	2	—	2	1
Tuberculosis ... ..	1	1	—	—	1	2	1
Phlyctenular, strumous and similar, not definitely tuberculous ... ..	8	1	3	6	3	8	4
Septicaemia, acute ...	—	—	—	—	—	—	2
Septicaemia, chronic ; autotoxic, focal sepsis	48	28	29	21	25	28	34
Other general infections and organismal diseases	—	3	—	1	—	—	2

*Traumatic and Chemical*

	1939	1940	1941	1942	1943	1944	1945
Birth trauma ... ..	2	—	2	2	2	1	1
Non-industrial trauma ... ..	3	—	6	2	3	2	—
Industrial trauma ... ..	2	3	6	3	2	2	6
War trauma ... ..	—	—	—	2	2	3	2
Trauma, category not ascertainable ... ..	—	—	—	—	—	1	—
Chemico-toxic, non-industrial (tobacco) (alcohol) (lead)	2	1	—	2	1	1	1
Scheduled industrial diseases (lead) (pyroxylin) (carbon bi-sulphide) (aniline) (phosphorus) (glass-blowers' cataract) (metal workers' cataract) (miners' nystagmus)	—	—	—	—	—	—	—
Sympathetic ophthalmia ...	4	7	2	—	2	6	1
<i>Systemic Diseases—</i>							
Anaemia and blood diseases ...	—	1	—	—	—	—	1
Diabetes ... ..	9	3	10	10	10	8	7
Nephritis ... ..	3	—	—	—	1	—	—
Pregnancy ... ..	—	1	1	1	—	—	—
Vascular diseases, including cerebral vascular lesions	34	17	33	39	16	33	39
Intracranial neoplasm ...	2	2	2	2	—	4	5
Other diseases of central nervous system ... ..	6	3	2	6	2	3	2
Functional disturbances (hysteria) (malingering) ...	1	—	—	—	—	—	—
Other general diseases ...	1	—	—	—	—	1	—
<i>Not Ascertainable Definitely</i> ...	6	8	2	3	1	2	2
Total ...	<u>401</u>	<u>292</u>	<u>317</u>	<u>364</u>	<u>303</u>	<u>310</u>	<u>338</u>

The largest number is included in the category "Congenital" and "Undetermined," and the most important individual causes of blindness are glaucoma cataract, myopia, septicaemia, and vascular diseases.

## LEGISLATION.

The following Acts of Parliament, Regulations, etc., dealing directly with Public Health (in Scotland), or having a bearing thereon, came into operation during the year:—

Education (Scotland) Act, 1945—Amending the law relating to Education in Scotland.

Public Health (Scotland) Act, 1945—Consolidating, with amendments, the provisions of Part IV of the Public Health (Scotland) Act, 1897, as amended by the Public Health Act, 1904, relating to epidemic, endemic or infectious diseases.

Town and Country Planning (Scotland) Act, 1945—Enabling Local Planning Authorities to acquire land; provides Exchequer assistance towards cost of redevelopment of war damaged areas and regulates compensation to be paid for land compulsorily acquired for public purposes.

Nurses' Act—Excluding county and district nursing associations and other similar organisations from the operation of Part II of the Nurses' Act, 1943, and Part II of the Nurses (Scotland) Act, 1943.

## CIRCULARS, ORDERS, REGULATIONS, ETC., ISSUED IN 1945.

*Education :—*

- D.H.S. Memo. No. 82 and S.E.D. No. 49 of 18/6/45. School Health Administration.
- D.H.S. Memo. No. 129 and S.E.D. No. 81 of 15/10/45. Handicapped Pupils School Leaving Medical Report.
- D.H.S. Memo. No. 147 and S.E.D. No. 45 of 7/11/45. School Medical Service. Scottish Education Department, Circular No. 38 of 12/9/45. Education (Scotland) Act, 1945.
- Scottish Education Department, Circular No. 56 of 8/2/46. Provision of Facilities for Recreation and Social and Physical Training.

*Housing :—*

- Department of Health for Scotland, Circular No. 11 of 10/2/45. Temporary Houses.
- Department of Health for Scotland. Explanatory Memorandum on Town and Country Planning (Scotland) Act, 1945.

*Maternity and Child Welfare :—*

- Department of Health for Scotland Circular No. 131 of 17/10/45. Illegitimate Children and their mothers.
- Department of Health for Scotland. No. 170 of 20/12/45. Welfare (Foods) Scheme. New "Mother and Child" Leaflet.
- Department of Health Circular No. 173 and Scottish Education Department Circular No. 51 of 24/12/45. Nursery Provision for Children under five.

*Milk :—*

- Department of Health for Scotland Circular No. 2 of 12/1/45. Freezing Point (Hortvet) Test of Milk.

*Nursing :—*

- Department of Health for Scotland Circular No. 25 of 15/3/45. Nurses' Salaries Committee.
- Department of Health for Scotland Circular No. 61 of 17/5/45. Scottish Nurses' Salaries Committee Mental Nurses.
- Department of Health for Scotland Circular No. 70 of 11/6/45. Nurses (Scotland) Acts, 1943 and 1945.
- Order No. 652/S.24 Nurses (Scotland) Act, 1943. (Commencement) Order, 1945, dated 25/5/45.
- Order No. 653/S.25. Nurses (Scotland) Regulations, 1945, dated 31/5/45.
- Order No. 654/S.26. Nurses Agencies (Scotland) Regulations, 1945, dated 31/5/45.
- Department of Health for Scotland Circular No. 158 of 26/11/45. Nurses (Scotland) Act, 1943, and Nurses (Scotland) Regulations, 1945.
- Order No. 1439/S.56. Nurses (Scotland) (No. 2) Regulations, 1945, dated 9/11/45.

*Port Health Services :—*

- Order No. 1438/S.55 of 6/11/45. Port Sanitary Amendment Regulations (Scotland).
- Department of Health for Scotland Circular No. 144 of 20/11/45. Port Sanitary Amendment Regulations (Scotland), 1945.

*Tuberculosis :—*

Department of Health for Scotland Circular No. 20 and A B H Memo. No. 427 of 6/3/45. Educational Provision for Civilian Patients in Hospitals and Sanatoria.

Department of Health for Scotland Circular No. 42 of 13/4/45. Tuberculosis Allowances.

Department of Health for Scotland Circular No. 126 of 28/9/45. Tuberculosis Allowances, Winter Allowance for Fuel.

Department of Health for Scotland Circular No. 165 of 6/12/45. Public Health (Tuberculosis) Regulations (Scotland), 1940.

*Miscellaneous :—*

Department of Health for Scotland Circular No. 113 of 7/9/45. Cancer Act, 1939.

Department of Health for Scotland Circular No. 71 of 31/5/45. Colliery Spoilbanks.

## SECTION II.

## VITAL STATISTICS.

In this section and Appendix I the figures and tables deal with the vital statistics of the city and the Municipal Wards into which it is divided for administrative purposes. Now that the war is over and the ban on the secrecy of the population is lifted, the statistics are given in more detail than has been the case since 1938, when the Annual Reports of the Department were considerably abridged. The following table summarises some of the principal vital statistics referring to the city as a whole :—

## SUMMARY.

	1939	1940	1941	1942	1943	1944	1945
Population ... ..	1,128,473	1,045,333	1,045,333	1,045,333	1,045,333	1,050,000	1,050,000
Acreage ... ..	39,725	39,725	39,725	39,725	39,725	39,725	39,725
Persons per acre ... ..	28	26	26	26	26	26	26
Number of Inhabited Houses ... ..	283,011	284,045	282,805	285,562	287,608	288,780	289,028
Deaths—Number registered ... ..	16,382	18,858	17,135	15,610	15,925	15,779	15,112
Deaths—After correction for Transfers ... ..	15,010	17,603	16,301	14,679	14,824	14,603	13,941
Births—Number registered ... ..	22,655	21,984	20,303	21,723	23,612	22,695	21,296
Births—After correction ... ..	21,682	20,965	20,365	20,615	22,363	22,203	20,294
Death rate per 1,000 living—							
All causes ... ..	13·30	16·84	15·59	14·04	14·18	13·91	13·27
Birth rate per 1,000 living ... ..	19·21	19·08	18·53	18·76	20·36	20·21	19·33
Deaths under One Year—							
After correction ... ..	1,737	1,983	2,267	1,863	1,825	2,108	1,379
Deaths under One Year—							
Per 1,000 births ... ..	80	95	111	90	82	95	68

## BIRTHS.

The number of births totalled 20,294, which is equal to a rate of 19·33 per thousand of the population. This is again a reduction on the relatively high birth rate of 1943 and may be associated with the movement of men on service and the reduction which has taken place in the marriage rate referred to below.

With regard to the rates in Municipal Wards, the highest was 27·6 in Gorbals compared with 25·6 for the preceding year, followed by Govan with 24·2 and Kinning Park and Cowcaddens both with rates of 23·5. The lowest rate, 12·2, is recorded in Langside Ward, while other low rates were 13·0 in Kelvinside and 13·5 in Cathcart. The number of births and the birth rates in each Municipal Ward with a comparison with the two previous years are given in Appendix Table V.

*Illegitimate Births.*—There were fewer illegitimate births, 1,684, registered during the year against 1,760 in 1944. These numbers form 8·3 and 7·2 per cent. respectively of the total births in the city. The percentage for 1945 is higher than the maximum reached during the last war when 8·1 was recorded. The number and percentage in each Municipal Ward is contained in Appendix Table V. The highest rate is 16·9 per cent. recorded in Park Ward, in which district are situated some small institutions for unmarried mothers. Other wards with a high percentage of illegitimacy were Blythwood, 16·8; Exchange, 16·5; and Sandyford, 13·8—all contiguous wards in the centre of the city. The lowest rate was 2·7 in Camphill.

### MARRIAGES.

There were 12,493 marriages among the city population in 1945 compared with 9,786 during the preceding year and 10,149 in 1943. This is the highest number recorded since 1939, when there were 13,214 marriages and in 1940, 14,615. The figure for 1945 is equivalent to 11·9 per cent. of the population compared with 9·3 for the preceding year. The following Table shows the marriage rate per thousand of the population since 1871 :—

Marriages per Thousand Persons Living :							
1871-1880	...	...	9·1	1936	...	...	9·2
1881-1890	...	...	9·3	1937	...	...	9·5
1891-1900	...	...	9·4	1938	...	...	9·7
1901-1910	...	...	8·8	1939	...	...	11·7
1911-1920	...	...	9·7	1940	...	...	13·9
1921-1931	...	...	8·9	1941	...	...	12·1
1931-1935	...	...	8·8	1942	...	...	11·9
1936-1940	...	...	10·6	1943	...	...	9·7
				1944	...	...	9·3
				1945	...	...	11·9

### DEATHS.

The number of deaths during 1945 corrected for inward and outward transfers was 13,941, which is equal to a rate of 13·28 per thousand of the population. The corresponding rates for 1944 and 1943 were respectively 13·91 and 14·18. This rate for 1945 is the lowest recorded, the previous lowest being 13·31 in 1938. The numbers of deaths and the corresponding death rates with a comparison of rates with the two previous years are given in Appendix Table VI. The lowest ward rate was 10·6 in Fairfield followed by a considerable number of wards with rates between 11 and 12, for example 11·0 in Ruchill; 11·3 in Yoker and Knightswood; 11·4 in Hutchestown; and 11·5 in Shettleston and Tollcross.

The highest rate, 16·5 in Calton is followed by Blythwood, 16·3, and Camphill, 15·4.

GLASGOW.—ALL CAUSES.—DEATH RATE PER 1,000 LIVING.

1881-1890	...	...	24·22	1931-1935	...	...	13·88
1891-1900	...	...	21·53	1936-1940	...	...	14·55
1901-1910	...	...	19·56	1941	...	...	15·59
1911-1920	...	...	16·36	1942	...	...	14·04
1921-1925	...	...	15·49	1943	...	...	14·18
1926-1935	...	...	15·04	1944	...	...	13·91
				1945	...	...	13·28

*Causes of Death.*—The number of causes of death are summarised in the following table :—

SUMMARY OF DEATH RATES PER MILLION FROM PRINCIPAL CAUSES.

General Diseases—				1943.	1944.	1945.
(a) Infectious	...	...	...	572	821	513
(b) Tuberculous—						
(1) Phthisis	...	...	...	1,013	1,080	1,033
(2) Others	...	...	...	321	279	249
(c) Malignant (Cancer, etc.)	...	...	...	1,768	1,690	1,832
Diseases of the Nervous System	...	...	...	1,534	1,551	1,547
Diseases of the Circulatory System	...	...	...	3,390	3,285	3,375
Diseases of Respiration	...	...	...	1,289	1,126	944
Congenital Defects and Malformations (including						
Premature Birth)	...	...	...	787	818	607
Violence	...	...	...	651	565	527
All Other Causes	...	...	...	2,856	2,693	2,650
				<hr/>	<hr/>	<hr/>
All Causes	...	...	...	14,181	13,908	13,277
				<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

The above statement summarises the principal groups of causes of death according to the International Short Classification as given in Appendix Table VIII. A considerable part in the reduction of the general death rate can be ascribed to the definite reduction in infant mortality, which will be dealt with in the next section of this report. The low infant mortality rate would also have to some extent an influence on the rates of mortality from infectious diseases. The rate per million of the population for this group at 513 is considerably below that of 821 for the preceding year and is the lowest recorded in the city. This low record was contributed to by the reduction in mortality from diphtheria, 31 against 59 in 1944, and 77 in 1943; the influenzal rate was also low, 44 against 75 in the preceding year, and 196 in 1943, while diarrhoeal diseases under 2 years of age were responsible for 367 deaths against 668 in 1944, when there was an extensive prevalence of enteritic infections among infants.

Mortality from other infectious diseases remained low, and although the death rate from measles, 23, was higher than the exceptionally low rate of 15 in 1944, it is interesting to record that there had been no heavy mortality from this disease since 1938, and even then the rate was only 228, whereas in 1934 the figure was 461.

Tuberculosis is dealt with in detail in Section IV of this Report. Reference is here made to the disease as one of the principal causes of mortality. The rate for pulmonary forms for 1945 was 1,033 per million of the population, compared with 1,080 for the preceding year. The following table again shows the excess mortality among men at ages over 35 and among women at younger ages under 35 years :—

	Males.		Females.	
	1938	1945	1938	1945
—15 years ... ..	33	30	31	30
—20 years ... ..	40	39	74	81
—25 years ... ..	72	65	93	115
—35 years ... ..	105	93	115	154
—45 years ... ..	99	104	52	50
—55 years ... ..	103	110	32	36
—65 years ... ..	58	97	20	20
+65 years ... ..	24	48	9	13
Total ... ..	534	586	426	499

From non-pulmonary forms of the disease the death rate, 249, again shows a reduction since the peak of recent years, 321, recorded in 1943. This lower rate is an approach to the pre-war mortality of 211 in 1937. The reduction is almost entirely due to the lower number of deaths from tubercular meningitis, the death rate from which was 159 against 185 in 1944 and 210 in 1943. The following figures show that the female deaths have been considerably reduced :—

				Number of Deaths.		
				1945	1944	1943
Males ... ..	...	...	...	82	86	93
Females ... ..	...	...	...	85	108	126

The reduction in female deaths was greatest during the age period 5-10 years.

The death rate from diseases of the nervous system is the second heaviest group of mortality. The rate of 1,547 in 1945, however, is slightly below the figure of 1,551 recorded in 1944. Intra-cranial vascular lesions were responsible for 1,255 of this rate against 1,242 in 1944 ; nearly 70 per cent. of which occurred at ages over 65 years of age.



Diseases of the circulatory system, the heaviest causes of mortality, were responsible for a death rate of 3,375 per million of the population against 3,285 in 1944 and 3,390 in 1943, when the maximum was reached. Here again the mortality occurred largely among old people, although the proportion under 65 years of age is greater than that due to cerebral conditions. The great bulk of the deaths are from heart diseases or from heart conditions, the rate for which is 3,110 against 3,011 for the preceding year.

Diseases of respiration are dealt with more fully in Section IV of this Report. The mortality in 1945 at 944 is the lowest on record and compares with 1,126 in 1944. This continued improvement is due to the further reduction in the mortality from pneumonia, 529 against 696 for the previous year and 840 in 1943. The death rate from bronchitis was slightly higher.

Congenital defects and malformations, including premature births, show a marked reduction in mortality, 607 against 818 in 1944. The rates for these causes should more properly be calculated against the births, but as these were fewer the improvement is more marked than is indicated by the death rate calculated on the total population. The indication here is that there has been quite a definite improvement in maternal health which has resulted in a reduction in both infant and maternal mortality.

The death rate from causes included under violence again shows a reduction, the rate being 527 compared with 565 in 1944, and 876 in 1941, when the maximum was reached during the "black-out." The age and sex distribution of the deaths are here abstracted to show where the reduction has taken place :—

	Males.					Females.				
	-5	-15	-45	+45	Total	-5	-15	-45	+45	Total
1941	45	57	170	361	633	33	28	44	178	283
1942	48	56	137	299	530	34	23	46	160	263
1943	51	47	118	234	450	23	32	31	145	231
1944	45	66	79	204	394	22	21	33	123	199
1945	37	67	77	179	360	25	19	24	125	193

The age and sex distribution of deaths according to causes is given in Appendix Table IX. The total male deaths numbered 7,363 compared with 7,847 for the previous year, while the corresponding figures for females were 6,578 and 6,756.

*Cancer.*—There was an increase in the death rate from cancer, 1,832 compared with 1,690 in 1944 and 1,768 in 1943. The general trend of the mortality has been towards a gradual increase from year to year, which can be correlated with the increasing number of persons surviving to older ages at which the disease mostly manifests itself. In the Registrar-General's report for England there is included a table giving effect to corrections for age and sex distribution of the mortality from different causes, and there it is shown that the death rate from cancer has remained more or less uniform during the past ten or twelve years.

The following analysis, giving site of lesions in relation to sex, shows where the increase has occurred. The deaths from cancer of the oesophagus and stomach, etc., were more numerous in 1945. Male deaths for the former site were 48 against 32, an increase of 50 per cent., while female deaths from cancer of the stomach and the duodenum are up from 150 to 193.

Deaths from disease of the liver, etc., numbered 70 against 61, and of the pancreas, 54 against 45, the male deaths being 35 and the females, 19. Cancer deaths from other digestive organs numbered 344 compared with 293 for the previous year.

The numbers of cancer deaths for other important sites were not markedly changed, although skin cancer was the cause of death in 23 instances against 13 in 1944.

#### GLASGOW.—DEATHS FROM CANCER.

Site of Lesion	Year 1945.			Year 1944.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
Buccal Cavity and Pharynx ...	57	14	71	63	12	75
Digestive Organs and Peritoneum—						
(a) Oesophagus ... ..	48	26	74	32	21	53
(b) Stomach and Duodenum ... ..	199	193	392	202	150	352
(c) Rectum ... ..	93	50	143	91	50	141
(d) Liver and Biliary Passages ... ..	30	40	70	28	33	61
(e) Pancreas ... ..	35	19	54	25	20	45
(f) Peritoneum ... ..	4	3	7	2	4	6
(g) Other Digestive Organs	175	169	344	136	157	293
Respiratory Organs ... ..	178	47	225	173	54	227
Uterus ... ..	—	105	105	—	95	95
Other Female Genital Organs	—	32	32	—	39	39
Breast ... ..	—	160	160	2	139	141
Male Genito-Urinary Organs ...	65	—	65	57	—	57
Skin ... ..	12	11	23	7	6	13
Other or Unspecified Organs ...	76	83	159	104	73	177
Totals ... ..	972	952	1,924	922	853	1,775

Deaths occurring in the City and transferred to other authorities numbered 1,861, and inward transfers 690, compared with the respective figures of 1,922 and 746 for the previous year.

The deaths occurring in hospitals, nursing homes, and other institutions compared with the respective figures for the preceding year were as follows :—

	1944.	1945.
Local Authority General Hospitals and Poorhouses ...	3,528	3,113
Local Authority Fever Hospitals and Sanatoria ... ..	1,245	1,142
Local Authority Mental Hospitals ... ..	533	439
Voluntary Hospitals and Infirmaries ... ..	2,213	1,963
Nursing Homes, etc. ... ..	208	215
Totals ... ..	<u>7,727</u>	<u>6,872</u>
Percentage of all Deaths ... ..	<u>52·91</u>	<u>52·9</u>

GLASGOW.

INFANT MORTALITY RATES AND RATES FOR CERTAIN PRINCIPAL CAUSES SINCE 1910.



## SECTION III.

## MATERNITY AND CHILD WELFARE.

The Maternity and Child Welfare Services have been busy throughout the whole year. The demand on them in certain areas is so great that temporary hatted clinic accommodation is to be provided until permanent health centres can be erected. The adaptation of Civil Defence buildings in the Oatlands area which will relieve the pressure on Florence Street Clinic is being carried out. The building will provide ante-natal and child welfare clinics. Duplication of medical staff has been found necessary at several centres to overtake the work. There is a growing demand for mothercraft teaching and child welfare facilities coming from all classes, and extension of the scheme to all areas of the city is needed.

The recognition of the value of organised ante-natal care is reflected in the attendance of expectant mothers at the various clinics. The number of new patients seen during 1945 was 10,558 as compared with 10,455 in 1944, and the number of sessions was correspondingly increased from 1,791 to 1,847. The pressure on the maternity bed accommodation still continues and is difficult to meet. The new unit at Robroyston Hospital has proved very popular and a second unit is being adapted. It will provide an additional 40 beds. The Municipal Domiciliary Midwifery Services have also worked under high pressure and have been called on to deal with a number of normal emergency cases which failed to obtain admission to hospital.

The outstanding success of the Home Help Scheme must be commented on. Details of its expansion and general working are described in this section.

The infant mortality rate is the lowest ever recorded. There is no doubt whatever that despite the fluctuations in the rate, which is characteristic for this city, the nutrition of children under one year is very much better than in pre-war years. Gross rickets is now hardly ever seen, and even the milder forms have been becoming less prevalent year by year. During 1945, however, there was a striking fall in the incidence. Coincident with this reduction was a rise in the consumption of national dried milk. In 1944 the average number of tins taken up by mothers each week was 3,000. In 1945 the weekly average rose to 10,000. The number is still increasing. This rise was mainly due to

propaganda carried out by the Public Health Department and the Press after the outbreak of gastro-enteritis in 1944. Early in 1945 national dried milk was reinforced with 800 units of Vitamin D to each pint of reconstituted milk. It seems a fair assumption that this change in the feeding of such a large proportion of Glasgow infants is the chief reason for the reduction in the incidence of rickets and a factor in the reduction of the infant mortality rate—a biological experiment of profound significance.

### INFANT MORTALITY.

The number of deaths of infants, after correction for inward and outward transfers, was 1,379, compared with 2,108 for the previous year. These figures represent an infant mortality rate of 68 per thousand births, compared with 95 for the preceding year when there was an exceptionally heavy mortality from enteritic diseases throughout the city.

The infant mortality rates for the past seven years have been as follows :—

1939 ...	80	1943 ...	82
1940 ...	95	1944 ...	95
1941 ...	111	1945 ...	68
1942 ...	90		

The rate for 1945 is the lowest on record, the previous lowest being 80 in 1939. The rates until recent years were usually in excess of 100, as shown in the diagram which has been introduced at the beginning of this Section.

Details of the causes of male and female deaths for each quarter during the first year of life are given in Appendix Table XII. The information there given is summarised in the following statement, which shows the relative magnitude of the principal groups of causes of death, compared with the rates for previous years since 1911.

MALES—	Causes of Death	Rate per 1,000 Births.								
		1911-20	1921-30	1931-35	1936-40	1941	1942	1943	1944	1945
	I. Immaturity ...	46	41	43	44	53	45	38	43	32
	II. Diseases of Respiratory System ...	29	32	30	25	26	18	17	16	11
	III. Diseases of Digestive System ...	20	15	17	19	22	22	19	36	22
	IV. Diseases of Nervous System ...	9	7	4	4	8	5	5	5	5
	V. Tuberculosis Diseases ...	5	2	1	1	1	1	2	1	1
	VI. Infectious Diseases ...	15	14	12	6	8	3	5	2	3
	VII. Suffocation ...	1	—	—	—	—	—	—	—	—
	VIII. All other causes ...	11	8	7	6	7	6	4	4	3
	All causes ...	136	119	114	105	125	100	90	107	77

FEMALES—		Rate per 1,000 Births.								
Causes of Death		1911-20	1921-30	1931-35	1936-40	1941	1942	1943	1944	1945
I.	Immaturity ... ..	36	33	33	35	41	36	33	33	28
II.	Diseases of Respiratory System ... ..	23	23	23	21	21	15	15	12	8
III.	Diseases of Digestive System ... ..	16	11	12	13	13	16	11	26	14
IV.	Diseases of Nervous System ... ..	7	4	3	3	6	4	4	4	4
V.	Tuberculous Diseases	3	2	1	1	2	1	1	2	1
VI.	Infectious Diseases ...	15	13	11	6	9	3	5	2	2
VII.	Suffocation ... ..	1	1	—	—	1	—	—	—	—
VIII.	All other causes ...	8	7	5	4	3	4	4	3	2
All causes ...		109	94	88	83	96	79	73	82	59
Ratio—Males to 100 Females		124	128	131	126	130	126	123	130	130

Despite the reduction of the infant mortality, the deaths among male children still preserves the 30 per cent. over the female mortality.

The heaviest causes of mortality are still the groups included under immaturity, the male rate being 32 against 43 for the preceding year, while the corresponding figures for females are 28 and 33. Premature birth is still the largest fatal cause in this group, but the nutritional policy of the Government with the priority scheme for expectant mothers is having a decided influence on the premature birth rate.

Diseases of the respiratory system have always taken a heavy toll on child life and, although fluctuations are bound to occur with variations in the severity of weather conditions, progress towards reduction has been made. The rates of 11 and 8 for males and females respectively are definitely the lowest on record and are less than half the rates for pre-war years.

The third highest cause of loss of child life is due to the digestive diseases. The 1945 rates of 22 for males and 14 for females are considerably below the corresponding figures of 36 and 26 for the previous year, which were exceptionally high owing to the unprecedented prevalence of recent years at least of widespread occurrence of enteritic diseases among infants. A special memorandum on that prevalence was included in the Report for last year. It should be recorded, however, that this prevalence was not confined to Glasgow alone, for heavy diarrhoeal mortality was also evident in other towns.

Deaths among infants from diseases of the nervous system were fewer, but death-rates, 5 for males and 4 for females, remain the same as for the previous year. Deaths from tuberculosis were fewer, 3 of the male deaths being from pulmonary causes against 6 from non-pulmonary forms, while the corresponding figures for females were 5 and 4.

The mortality in males from infectious diseases was higher, 3 against 2, while the rate for females is again 2. Cerebro-spinal fever was the highest cause of mortality in this group, followed by measles and whooping-cough.

*Infant Mortality in Wards.*—The ward distribution of infant deaths and corresponding rates compared with previous years are given in Appendix Table VIII. In only three wards of the city was the rate in excess of 100—Exchange, 121; Gorbals, 113; and Cowcaddens, 100—whereas in the previous year no less than fifteen wards had rates of that magnitude. This year, in ten wards the infant mortality was below 50 as follows :—

Cathcart	...	...	23	Pollokshields	...	...	41
Langside	...	...	24	Kelvinside	...	...	43
Camphill	...	...	35	North Kelvin	...	...	44
Partick West	...	...	37	Fairfield	...	...	46
Park	...	...	40	Yoker and Knights-	...	...	47
				wood			

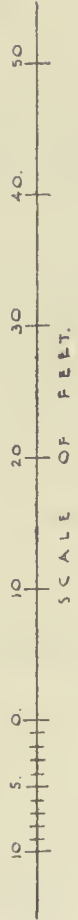
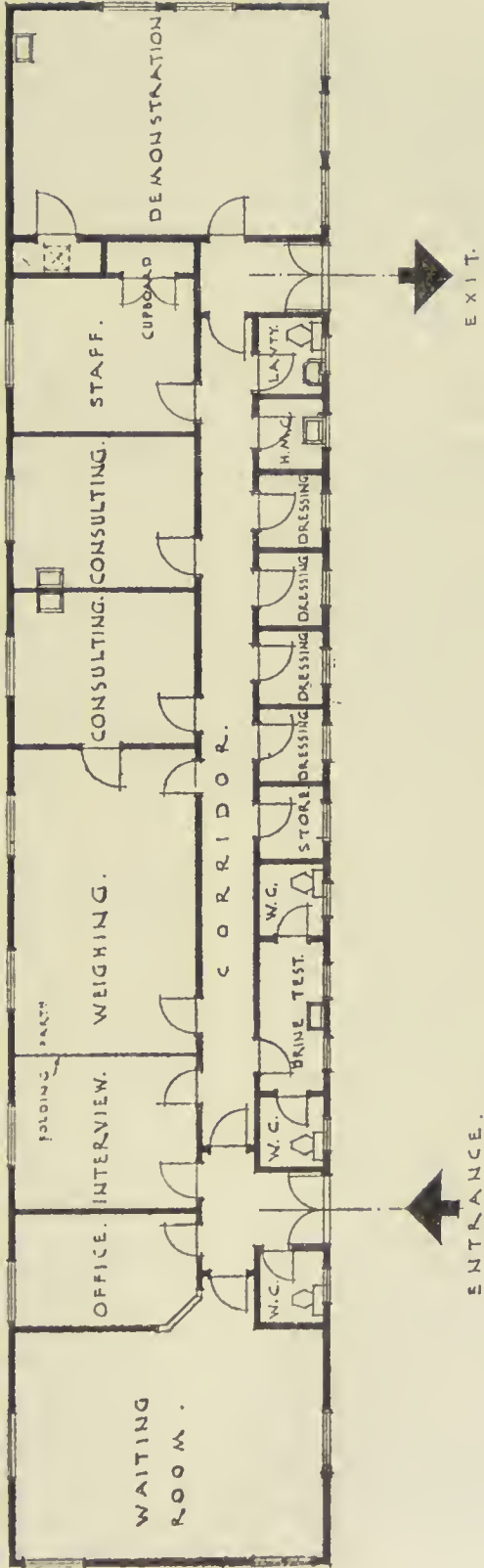
*Illegitimate Mortality.*—There were 155 infant deaths among the 1,684 illegitimate births, which is equivalent to an infant mortality rate of 92. The corresponding rate for the preceding year was 127.

*Notification of Still Births.*—The number of still births registered in the city during the year was 800 compared with 901 for the preceding year. There were 110 outward and 40 inward transfer still births, so that the net total for the city was 730 against 832. This is equal to 3·5 per cent. of the births compared with 3·6 in 1944.

From information obtained regarding still births reported under the Notification of Births Acts, it is found that 2·7 per cent. of all births in the practice of doctors were still births, and of those medically attended in institution 4·5 per cent. Together the rate indicated is 4·2. Among non-medically attended births the corresponding rate was 2·0. Detailed statistics are given in Appendix Tables XIII and XIV.



# PLAN OF TEMPORARY MATERNITY & CHILD WELFARE CLINIC



## CHILD WELFARE SCHEME.

There has been no expansion in the clinic provision during the year. It is intended, however, to make new health centre provision in several large housing schemes and these are now receiving consideration. Temporary hutted units are to be erected, giving ante-natal and child welfare facilities and the accommodation to be available is illustrated in the sketch plan on page 29.

There are now 17 centres throughout the city, 13 of which are situated in premises specially constructed for the purpose, while 2 more are held in suitable accommodation in administrative buildings. Quite a number of alterations have been made in the sessions held at these clinics to meet the variation in numbers and the convenience of mothers and staff. The total number of sessions is now 104, which includes 37 Ante-natal Clinics, 62 Child Welfare sessions and 5 for Ultra Violet Ray treatment. Some alterations in the day of meeting at Penilee have been made, while two additional sessions were given in other clinics, one at Blawarthill and the other in Pollokshaws. In addition to these, both Ante-natal and Child Welfare Clinics continue to be conducted at Elderpark Child Welfare Centre and the Royal Maternity Hospital.

The time table of the clinics as now organised is given below and on page 31.

## LIST OF MATERNITY AND CHILD WELFARE CLINICS.

	9 a.m.	1.30 p.m.
MONDAY,	15 Glenbarr Street, Provan. 106 Orr Street. 26 Florence Street. 2 Summertown Road, Govan (Ante-natal). 20 Arklet Road, Elder Park (Ante-natal). 33 Richard Street (Ante-natal). Sandy Road, Partick (-1 year). 26 Florence Street (Ante-natal). 194 Fernbank Street (Ante-natal). 150 Wellshot Road, Shettleston (Ante-natal).	15 Glenbarr Street, Provan (Ante-natal). Sandy Road, Partick (Ante-natal). 60 Avenuepark Street. 106 Orr Street. 26 Florence Street. 2 Summertown Road, Govan (Ultra-Violet Ray). 614 Dobbie's Loan (Ante-natal). 194 Fernbank Street, Springburn. 15 Glenbarr Street (Ultra-Violet Ray). 101 Denmark Street. 150 Wellshot Road, Shettleston. Craigmuir Road, Penilee (Ante-natal).

9 a.m.

TUESDAY, 33 Richard Street (1-5 years).  
 194 Fernbank Street, Springburn.  
 60 Avenuepark Street (Ante-natal).  
 150 Wellshot Road, Shettleston.  
 15 Glenbarr Street, Provan.  
 2 Summertown Road, Govan.  
 106 Orr Street (Ante-natal).  
 26 Florence Street  
 614 Dobbie's Loan.  
 132 Weir Street.  
 20 Arklet Road, Elder Park (Ante-natal).  
 18 Plean Street, Blawarthill

WEDNESDAY, 33 Richard Street (-1 year).  
 60 Avenuepark Street.  
 614 Dobbie's Loan.  
 18 Plean Street, Blawarthill.  
 106 Orr Street (Ante-natal).  
 33 Harriet Street.  
 2 Summertown Road, Govan  
 (Ultra-Violet Ray).  
 150 Wellshot Road, Shettleston.  
 15 Glenbarr Street, Provan.  
 Craigmuir Road, Penilee (Ante-  
 natal).

THURSDAY, 614 Dobbie's Loan.  
 106 Orr Street (Ante-natal).  
 15 Glenbarr Street (Ante-natal).  
 26 Florence Street.  
 132 Weir Street.  
 33 Richard Street.  
 2 Summertown Road, Govan  
 (Ante-natal).  
 194 Fernbank Street, Springburn.  
 112 Ingram Street.  
 Sandy Road, Partick (Ante-natal).  
 Craigmuir Road, Penilee.

FRIDAY, 18 Plean Street, Blawarthill.  
 101 Denmark Street (Ante-natal).  
 614 Dobbie's Loan (Ante-natal).  
 60 Avenuepark Street.  
 106 Orr Street (Ante-natal).  
 150 Wellshot Road, Shettleston.  
 (Ante-natal).  
 26 Florence Street.  
 2 Summertown Road, Govan.  
 15 Glenbarr Street, Provan.  
 33 Richard Street.

1.30 p.m.

33 Richard Street (Ante-natal).  
 Sandy Road, Partick (-1 year).  
 614 Dobbie's Loan (Ante-natal).  
 106 Orr Street.  
 150 Wellshot Road, Shettleston.  
 26 Florence Street (Ante-natal).  
 20 Arklet Road, Elder Park (Ante-natal).  
 26 Florence Street.  
 101 Denmark Street.  
 33 Harriet Street.

18 Plean Street, Blawarthill (Ante-natal).  
 194 Fernbank Street, Springburn (Ante-  
 natal).  
 106 Orr Street.  
 26 Florence Street (Ante-natal).  
 2 Summertown Road, Govan.  
 150 Wellshot Road, Shettleston.  
 33 Harriet Street.  
 Craigmuir Road, Penilee.

Sandy Road, Partick (1-5 years).  
 60 Avenuepark Street (Ante-natal).  
 614 Dobbie's Loan.  
 106 Orr Street.  
 150 Wellshot Road, Shettleston (Ante-  
 natal).  
 26 Florence Street.  
 132 Weir Street.  
 2 Summertown Road, Govan (Ante-  
 natal).  
 26 Florence Street (Ante-natal).  
 15 Glenbarr Street (Ultra-Violet Ray).

614 Dobbie's Loan.  
 106 Orr Street.  
 101 Denmark Street  
 2 Summertown Road, Govan (Ultra  
 Violet Ray).  
 20 Arklet Road, Elder Park.  
 15 Glenbarr Street, Provan.  
 33 Harriet Street (Ante-natal).  
 18 Plean Street, Blawarthill (Ante-natal)  
 150 Wellshot Road, Shettleston  
 26 Florence Street (Ante-natal).  
 Craigmuir Road, Penilee.

Elderpark Infant Consultations—Monday, Wednesday and Thursday at 1.30 p.m.  
 Maternity Hospital Ante-Natal Clinics—Daily, Monday to Friday, at 1.30 p.m.,  
 Saturday, 9.30 a.m. — 1 Year Clinics, Monday, Wednesday and Friday, 9 a.m.  
 Vaccination is also done at 20 Cochrane Street on Tuesdays at 12 noon.

The number of consultations held during 1945 was 3,231 compared with 3,009 for the preceding year and the total number of attendances at these consultations was 145,171, compared with 156,062 during 1944. The number of infants under one year attending for the first time was 9,299, compared with 10,271 for the preceding year, while the corresponding figures for subsequent attendances were 107,142 and 119,872. The number of children over one year attending for the first time was 1,212, compared with 1,267, and the subsequent attendances numbered 27,518, against 24,652.

The following table gives the attendance at each consultation centre during 1945, with the corresponding total figures for the previous year:—

ATTENDANCES AT INFANT CONSULTATIONS, 1945.

	No. of Consultations held.	Children—1 year.		Children+1 year.		Total No. of Attendances.		1944—Total No. of Attendances.	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
Gorbals... ..	344	1,303	15,649	176	2,789	1,479	18,438	1,620	17,99
Cowcaddens ...	250	458	4,331	70	1,888	528	6,219	629	8 28
Elder Park ...	198	627	7,126	48	2,249	675	9,375	823	11,18
Provan ... ..	247	601	5,886	126	1,563	727	7,449	760	8,02
Govan ... ..	150	507	5,112	52	1,722	559	6,834	586	7,63
Orr Street ...	293	1,169	12,316	154	2,891	1,323	15,207	1,332	15,55
Maryhill ... ..	149	497	5,163	46	1,036	543	6,199	615	7,05
Partick ... ..	146	474	4,969	40	1,310	514	6,279	646	7 74
Richard Street	201	445	5,414	31	1,338	476	6,752	641	8,49
Shettleston ...	293	938	12,199	121	4,092	1,059	16,291	1,117	16,03
Weir Street ...	150	282	3,885	36	1,641	318	5,526	396	6,36
Ingram Street...	51	67	799	15	346	82	1,145	123	1,32
Springburn ...	146	404	5,387	18	823	422	6,210	533	7,69
Blawarthill ...	140	540	3,887	53	1,182	593	5,069	666	6,50
Pollokshaws ...	142	329	4,747	54	1,008	383	5,755	436	5,68
Denmark Street	145	386	5,815	31	580	417	6,395	457	7,67
Penilee ... ..	186	272	4,457	141	1,060	413	5,517	158	1,26
	3,231	9,299	107,142	1,212	27,518	10,511	134,660	11,538	144 52

*Supply of Milk to Mothers and Children.*—Since August, 1940, supplies of milk for expectant and nursing mothers and children under five years of age have been distributed under national arrangements, and the only function falling upon the department in connection with that scheme is to distribute application forms through the Child Welfare Centres. A small amount of certain vitaminised dried milk continues to be supplied from the Centres but the majority of artificially fed infants are being given national dried milk.

The total number of packets supplied free was 1,618, representing a cost of £155 1s. 2d.

Where family income was above the scale of necessity, 125,766 packets were supplied at cost price to mothers and children.

It is gratifying to note that there has been an increase in the amount of dried milk taken up. Every opportunity is taken to teach the mothers the advantages of dried milk over liquid milk in the feeding of young infants.

Dietary supplements as shown below were also issued from the Centres :—

	Lbs.	Cost.
Cod Liver Oil ... ..	2,880	£456
Cod Liver Oil Emulsion ...	6,007	437
Chemical Food ... ..	3,568	376
Sundry Foods ... ..	150	16
	<u>12,605</u>	<u>£1,285</u>

The booklet "Health of Mother and Child" in its enlarged form, continued in demand at the Centres, and 8,125 copies were sold during the year. Large numbers were supplied to other Local Authorities in England and Scotland by special arrangement.

*Ante-Natal Consultations.*—Sessions at ante-natal clinics numbered 1,847, compared with 1,791 for the preceding year. The total attendances were 70,068, compared with 70,541 in 1944; primary attendances were 10,558, or 103 more than in the previous year (1944); subsequent attendances numbered 59,510, a decrease of 576. Consultations and attendances at each of the Centres are shown in the following table :—

## ATTENDANCES AT ANTE-NATAL CLINICS, 1945.

	No. Clinical Sessions.	Number of Attendances.		
		Primary.	Subsequent.	Total.
Partick ... ..	99	544	3,042	3,586
Cowcaddens ... ..	148	479	2,560	3,039
Maryhill ... ..	99	543	2,856	3,399
Springburn ... ..	97	367	2,198	2,565
Bridgeton ... ..	205	1,400	7,849	9,249
Shettleston ... ..	151	1,016	6,540	7,556
Gorbals ... ..	250	1,721	9,762	11,483
Govan ... ..	151	1,137	5,958	7,095
Elderpark ... ..	145	836	4,907	5,743
Anderston ... ..	96	564	2,609	3,173
Blawarthill ... ..	102	556	3,286	3,842
Provan ... ..	99	593	3,078	3,671
Pollokshaws ... ..	50	257	1,503	1,760
Denmark Street ... ..	52	340	1,865	2,205
Penilee ... ..	99	205	1,497	1,702
	<u>1,847</u>	<u>10,558</u>	<u>59,510</u>	<u>70,068</u>

In addition to the above, ante-natal consultations were carried on at the four municipal hospitals out-patients department, namely, Stobhill Hospital, Southern General Hospital, Eastern District Hospital, and Western District Hospital. The new cases registered at these consultations during 1945 numbered 2,645, and they made 8,663 attendances. The corresponding figures were 2,059 and 9,483 in 1944 respectively.

Among the 9,744 patients whose pregnancy terminated in 1945 (excluding abortions) 32 deaths occurred, giving a death-rate of 3·3 per thousand births, compared with 4·1 for the year 1944. There were 5 deaths from puerperal septic conditions. Deaths among the other 27 patients were as follows:—

Toxaemias of Pregnancy ... ..	1
Other Diseases and Accidents of Pregnancy ... ..	1
Haemorrhage of Childbirth and the Puerperium ... ..	5
Puerperal Toxaemias ... ..	1
Other Accidents of Childbirth ... ..	6
Tuberculosis of Respiratory System ... ..	3
Heart Disease ... ..	3
Pneumonia ... ..	1
Other Respiratory Diseases ... ..	1
Chronic Nephritis ... ..	1
Violent Causes ... ..	1
All other Causes ... ..	3

Excluding the 13 deaths which had little association with the puerperal state, the maternal death-rate of mothers attending the clinics would be 1·9, compared with 3·47 for the city as a whole.

The total number of cases attending the ante-natal dispensary of the Maternity Hospital for the first time was 3,292, compared with 3,354 in 1944, the total attendance was 16,990, against 18,108. Of the 2,289 cases treated to a termination in delivery, 405 were treated in their own homes. There were 1,096 admissions to the ante-natal wards. At the infant consultations held at the hospital there were 2,750 attendances as compared with 3,141 in 1944.

*Dental Treatment of Expectant Mothers.*—The scheme approved by the Corporation in 1935 to provide dental treatment for necessitous and partly necessitous mothers in need of treatment was continued. Applications for treatment numbered 764, a decrease of 204 from 1944. Of these, 675—or 88·3 per cent.—were wholly or partly necessitous. The charges made in partly necessitous cases are determined by a scale of necessity approved by the Corporation. Attendances totalled 4,198, of which 757 were first attendances. Extractions made numbered 6,195, and 829 dentures were completed. Scaling, filling, dressing, and other work necessitated over 1,436 attendances of patients.

*Maternal Mortality.*—The following statement showing the maternal mortality deaths and rates is from figures supplied by the Registrar-General :—

STATEMENT SHOWING MATERNAL DEATHS AND RATES PER 1,000 BIRTHS IN GLASGOW AND SCOTLAND IN THE YEARS 1941-1945.

	Deaths.					Rate per 1,000 Births.				
	1941.	1942.	1943.	1944.	1945.	1941.	1942.	1943.	1944.	1945.
Accidents of Pregnancy	6	2	5	6	6	0·28	0·09	0·22	0·26	0·28
Puerperal Haemorrhage ...	22	16	34	13	11	1·03	0·74	1·47	0·56	0·52
Puerperal Septicaemia, including Post-abortive Sepsis ... ..	52	56	43	38	24	2·44	2·57	1·86	1·56	1·14
Toxaemia of Pregnancy, Albuminuria Convulsions	21	21	19	20	14	0·98	0·96	0·82	0·87	0·67
Other Puerperal Diseases	20	16	19	15	18	0·94	0·74	0·82	0·65	0·86
Totals— Glasgow ...	121	111	120	92	73	5·67	5·10	5·19	3·99	3·47
Scotland ...	439	380	364	294	249	4·69	4·1	3·7	3·0	2·8

During the year 73 deaths occurred from maternal causes, equivalent to a rate of 3.47 per 1,000 live and still births, which compares with a rate of 3.99 for the previous year. The rates prior to 1940 are based on the live births only.

### ULTRA-VIOLET RAY CLINICS.

No alteration has taken place in the arrangements for light treatment of children suffering from rickets, malnutrition, etc.

The installation and the results of treatment have been fully dealt with in previous reports, so that only the records of numbers treated are here given in respect of 1945 :—

#### RECORD OF ATTENDANCES AND CONSULTATIONS DURING 1945.

	Number of Clinics held.	Children —1 year. Number of Attendances.		Children +1 year. Number of Attendances.		Mothers. Number of Attendances.		Total Number of Attendances.	
		Prim.	Sub.	Prim.	Sub.	Prim.	Sub.	Prim.	Sub.
Provan ...	98	17	174	286	6,243	11	88	314	6,505
Govan ...	147	64	698	410	8,985	8	63	482	9,746
	245	81	872	696	15,228	19	151	796	16,251
		953		15,924		170		17,047	

### INFANT VISITATION.

Under the scheme of infant visitation every birth is visited if the notification does not state that a medical practitioner has been in attendance, and the following table shows the record of those visited, together with certain information obtained :—

	1943.	1944.	1945.
Inquiry Cards returned ... ..	17,263	17,929	16,869
Full information obtained	16,897	17,539	16,524
Doctor found in attendance	1	1	—
Others ... ..	365	389	345
Inquiry Cards issued ... ..	17,333	17,942	16,728



## VISITATION BY NURSES.

Altogether the health visitors made 208,625 home visits during the year, compared with 233,586 during the preceding year. Of these totals the respective numbers for infants under one year of age were 88,973 and 100,317. First visits numbered 15,185. In addition 63,675 visits were made to houses in respect of toddlers, while 12,489 other toddlers were seen during the course of routine visitation of infants. Other visits were made for special enquiries, etc., as shown in the following table :—

## VISITS MADE BY NURSES.

	1944.	1945.
Infants under one year—Primary visits ...	16,051	15,185
Infants under one year—Subsequent visits	84,266	73,788
	<u>100,317</u>	<u>88,973</u>
Children one to five years ... ..	66,809	63,675
Children seen while visiting infants ...	14,333	12,489
Ophthalmia Neonatorum ... ..	4,430	2,636
Puerperal Fever ... ..	3	18
Maternal Deaths Enquiries ... ..	2	3
Infant Deaths ... ..	104	114
Ante-natal Visits ... ..	6,196	5,266
Venereal Diseases ... ..	270	210
Light Treatment ... ..	617	540
Pneumonia ... ..	97	9
Other Visits ... ..	1,635	1,352
Houses Shut ... ..	38,773	33,340
	<u>219,253</u>	<u>196,136</u>
Infants or Children brought to Central Clinic for Treatment, etc.—		
Child Welfare ... ..	311	280
Venereal Diseases ... ..	63	57
Others ... ..	393	385
	<u>767</u>	<u>722</u>

In addition to home visitation, the nurses attend the Child Welfare and other consultations in their own districts. They thus have an opportunity of reporting to the doctor any illness or condition requiring medical treatment and following up cases afterwards to see that the treatment recommended is carried out.

## DAY NURSERIES.

*Holmlea Nursery.*—Holmlea Nursery (*see frontispiece*) was one of three built to a Government plan, and was opened in May, 1944, and can admit fifty children. The building is so constructed that children of different ages are accommodated in separate rooms. There is a small ward for babies and a larger room for children just beginning to toddle who are not able to mix with the older and more boisterous 2-5 year-olds. They have a larger playroom filled with toys and playthings suited to their growing activities. The building is L-shaped as shown on the block plan on the next page and is completely surrounded by glass so that as much sun can enter as possible. All the rooms have easy access to the outside playground, where there is a sand-pit, and ample space for outdoor games.

Off the wards is the sanitary accommodation, fitted with baths, low wash hand basins and small w.c.'s. Each child has his own tooth-brush, mug, face-cloth and towel, and he very quickly learns where to find his own things, each place being distinguished by a small coloured picture.

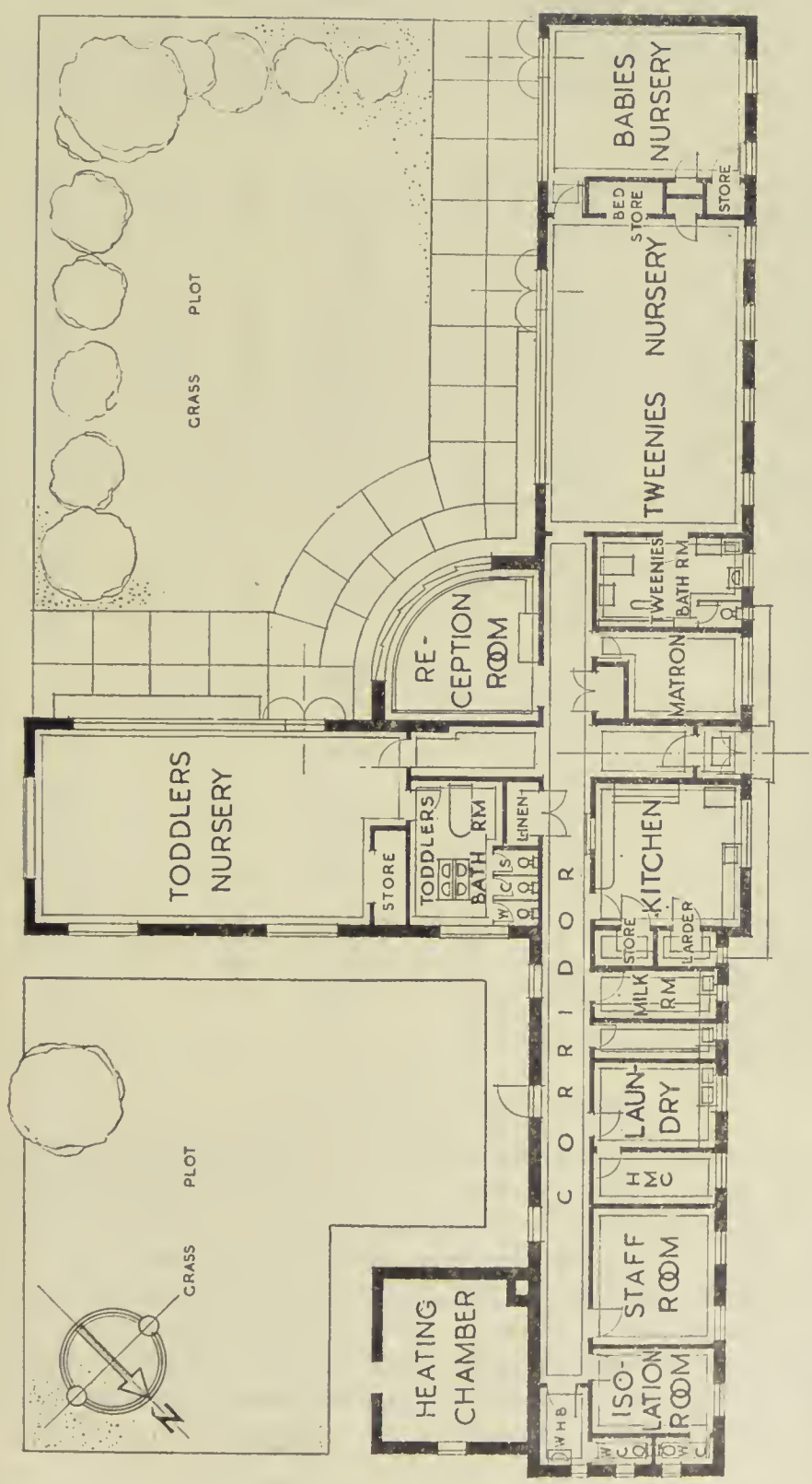
The administrative office, staff dining-room, and cloakroom, and the kitchen and milk room, occupy the remainder of the building and are in such positions as to minimise the work of the staff. The staff consists of a matron, deputy matron, nursery nurses and trainees, with the necessary domestic staff.

The children live out of doors as much as possible and very soon show by their happiness and good health the value of an open-air life, well-balanced meals and sufficient rest. The nursery is well attended and the children are obviously happy in the companionship of other children.

The nursery is visited regularly by a Child Welfare Medical Officer who supervises the health and any medical treatment the children may require.

The attendances at the three Day Nurseries, viz., Cowcaddens, Kingston, and Bridgeton, were as follows :—

Nursery.	Number of Days open.	Total Attendances during the year	Average.	Maximum number in one day.	Accommodation for.
Bridgeton ...	251	8,880	35	45	40
Kingston ...	248	8,299	40	36	44
Cowcaddens ...	249	8,907	32	46	45



PLAN

HOLMLEA NURSERY.

## WAR-TIME DAY NURSERIES.

	Opening Date.	Days Open.	Total Attend. for Year.	Average Daily Attend. ance.	Max. No. in one Day.	Accommodation for
Central—						
Atholl House ...	18/3/42	298	8,571	29	45	45
Bowmont Terrace	2/8/43	298	7,322	25	39	60
Castlebank House	24/4/44	300	9,446	31	48	54
Fortrose Street ...	4/1/44	301	5,966	19	33	34
Great Western Rd.	21/10/42	301	7,408	27	38	40
Grosvenor Crescent	12/2/45	262	6,899	26	45	50
Hatfield Drive ...	9/10/44	301	7,603	23	30	30
4 Hughenden Ter.	21/6/44	361	9,054	25	36	40
6 Hughenden Ter.	26/9/44	300	6,829	22	36	46
2 Prince Albert Rd.	11/12/44	296	7,642	25	43	50
Sandyford Place ...	3/3/43	305	9,777	36	51	60
Scotstoun House	2/2/44	300	8,951	30	45	50
Westbourne Gdns.	22/1/45	234	6,607	28	45	70
9 Winton Drive ...	11/9/43	297	6,778	23	35	50
21 Winton Drive ...	19/4/44	303	7,464	25	34	38
North—						
Ann Street ...	2/3/42	311	9,796	32	49	48
Belhaven ...	20/7/42	294	8,338	30	42	50
Hamiltonhill ...	18/10/43	298	9,588	32	45	45
Lansdowne Crescent	28/6/43	296	8,169	27	40	45
East—						
Crail Street ...	10/8/42	297	9,794	33	46	50
Onslow Drive ...	9/8/43	297	9,001	30	49	60
Quarrybrae ...	11/9/43	298	9,360	37	50	50
Westercraigs ...	5/3/42	297	7,225	22	38	45
South-east—						
Bedford Street ...	22/6/42	301	8,063	26	44	50
Holmlea Road ...	17/5/44	286	8,814	35	50	50
Pollokshaws ...	1/2/43	296	7,854	26	38	40
Sinclair Drive ...	17/6/42	296	8,791	30	43	40
South west—						
Clutha Street ...	20/3/44	305	10,690	35	50	50
Elderpark ...	20/10/41	296	8,437	29	42	45
Newark Drive ...	15/8/43	300	7,878	26	41	40
Nithsdale Road ...	12/7/34	300	7,633	33	44	45
Residential Nurseries—						
Knapps, Kilmacolm	17/3/43	365	8,346	23	30	30

## HOME HELP SCHEME, 1945.

One of the most gratifying features of the work of the Department has been the success of the Home Help Scheme. It was feared that there might be difficulty in recruiting a substantial number of helps. This fear has not been realised. Throughout the year there has been a steady supply of applicants to become home helps, and during the latter months approximately 300 helps were in employment. About one-fourth of the number are engaged in the Maternity Scheme and three-fourths in the General Scheme. The maximum period for which a help is granted is 56 days.

Applications for maternity helps increased from 192 in 1944 to 711 in 1945. Of these applications, 464 cases were completed, 125 were cancelled, and 122 were carried forward for completion in 1946. There were 6,106 working days.

In the General Scheme there were 468 applications. Of these, 52 were cancelled, leaving 416 cases to be dealt with. There were 10,833 working days.

The charges for both schemes are the same and are made in accordance with the Corporation's scale of necessity. They vary from 1s. to 10/2 per day. After payment of £1,415 12s. 4d. the net cost to the Corporation was £1,688 5s. 4d. for the 464 maternity cases. For the 416 general cases the net cost was £3,193 3s. 1d. after payment of £2,313 12s. 5d. In the Maternity Scheme 9 per cent. of the applicants paid only 1s. to 1/11 per day and 7 per cent. the full amount of 10/2. In the General Scheme the percentage was 20 and 18 respectively.

The following table shows the illnesses or other conditions under which applications for Domestic Helps were made.

Diseases.	-40 yrs.	40-60 yrs.	+60 yrs.	Totals.
Influenza ... ..	14	6	1	21
Cancer ... ..	—	8	3	11
Diabetes ... ..	—	—	2	2
Intra Cranial Vascular Lesion ...	—	9	15	24
Heart Disease ... ..	6	16	12	34
Circulatory ... ..	23	41	27	91
Bronchitis ... ..	4	5	5	14
Pneumonia ... ..	6	7	—	13
Pleurisy ... ..	5	3	1	9
Respiratory ... ..	3	3	2	8
Digestive ... ..	7	6	1	14
Nephritis ... ..	2	—	—	2
Nervous Diseases ... ..	4	12	3	19
Debility following illness ... ..	19	9	6	34
Debility following operation ...	24	30	7	61
Accident ... ..	3	14	10	27
All other Causes ... ..	14	15	3	32
Totals ... ..	134	184	98	416

*Maternity Bundles.*—Bundles or part bundles to the number of 785 were supplied in respect of which part payment received amounted to £32 19s. 8d.

## MIDWIVES (SCOTLAND) ACTS.

During 1945 there was an increase of 6 in the number of midwives who notified their intention to practise, so that there are now 150 on the register. This increase is due to an increase in the number of Municipal Midwives and in County Midwives attending Glasgow cases at the boundary. The number of those entitled to registration by examination is 140, while the number of those registered as having been in practice in 1914 is now 7. There are also 3 with other recognised qualifications. The number who notified their intention to practise for the first time was 28.

During the year there were 1,389 occasions on which medical help was called by midwives, which represents 31·3 per cent. of the total births occurring in the practice of midwives. Details of the nature of emergency are not given this year, but the following indicates the period during which medical assistance was called :—

	1942.	1943.	1944.	1945.
In all cases in which a woman during pregnancy, labour, or lying-in appears to be dying or is dead ... ..	—	—	—	—
PREGNANCY.—In cases of a pregnant woman where there is any abnormality or complication ... ..	36	46	71	35
LABOUR.—In the case of a woman in labour at or near term, where there is any abnormality or complication ...	948	1,070	1,088	985
LYING-IN.—In the case of a lying-in woman, when there is any abnormality or complication ... ..	140	169	158	189
THE CHILD.—In the child, when there is any abnormality or complication ...	185	197	206	180
Cannot be classified ... ..	3	9	—	—
Total ... ..	<u>1,312</u>	<u>1,491</u>	<u>1,523</u>	<u>1,389</u>

Fees to doctors attending emergency cases amounted to £835 2s., and during the year £464 10s. 2d. was recovered and £2 1s. withdrawn from medical practitioners' accounts.

*Municipal Midwives.*—The service carried out by these midwives continues to increase in popularity, and the number of the midwives is 43. These nurses paid 12,219 ante-natal visits, 36,133 visits during the puerperium and 5,281 visits to the babies until the age of one month. This continuity of supervision for the first four weeks has many advantages, particularly with regard to the establishment of breast-feeding. The Municipal Midwives are having a striking success in this connection. Of the 2,296 confinements attended, 7 terminated in a still-birth.

## NURSING HOMES REGISTRATION (SCOTLAND) ACT, 1938.

Three applications for registration of Nursing Homes were made during the year. One of these was granted and the remaining two cases were still under consideration at the end of the year. One of the applications was for a new certificate consequent upon a change of management, and two were new applications.

One certificate was withdrawn. This was in the case of an owner who died.

No fresh applications for exemption were received.

The following table shows the position of Nursing Homes at 31st December, 1945 :—

	Registered.	Exempted.
Maternity Hospitals ... ..	—	2
General Infirmarys and Hospitals ...	1	9
Nursing Homes ... ..	41	4
	<u>42</u>	<u>15</u>

## OPHTHALMIA NEONATORUM.

During 1945, 327 cases were notified, compared with 532 in 1944. On analysis the cases were classified as follows :—

Ophthalmia Neonatorum ... ..	127
Simple Conjunctivitis ... ..	82
Purulent Conjunctivitis ... ..	102
Dacryocystitis ... ..	1
Stye ... ..	1
N.A.D. ... ..	14
	<u>327</u>

Cases of ophthalmia neonatorum according to nature of attendance at birth :—

Doctors ... ..	21
Institutions ... ..	95
Institution Nurses ... ..	106
Midwives ... ..	105
	<u>327</u>

The onset in relation to age was as follows :—

— 12 Hours	...	...	...	...	29
— 4 Days	...	...	...	...	78
— 8 Days	...	...	...	...	103
+ 8 Days	...	...	...	...	103
N.A.D.	...	...	...	...	14
					<u>327</u>

Smears were taken in every case and of the 327 cases, 16 were positive for gonococcus, compared with 21 in 1944 and 30 in 1943.

Forty-seven of the cases were admitted to Baird Street Hospital for treatment and 14 attended for daily treatment as outdoor cases, making 44 attendances in all. The remaining cases were treated by health visitors who paid 2,636 visits. In addition, 14 cases, three of which were positive for gonococcus, were admitted to the hospital from other authorities outside the city.

Four of the positive cases were treated with penicillin ; the results were good but no better than when treated with sulphathiazole. But when both drugs were used, i.e., penicillin (2,500 units per c.c.) and sulphathiazole given by the mouth, the eyes cleared up more rapidly than when either drug was used alone. The method of using penicillin was that recommended by Sorsby in his recent publication on ophthalmia neonatorum.

In no case was there any impairment of vision.

The Wasserman test for syphilis was carried out in all the hospital cases and in no instance was it positive.

#### PUERPERAL FEVER AND PUERPERAL PYREXIA.

During the year there were registered 288 cases of puerperal fever and 204 cases of puerperal pyrexia, compared with 387 and 206 respectively for the preceding year. All but four cases of puerperal fever and twelve pyrexias were removed to hospitals or other institutions.



Deaths associated with cases of puerperal fever notified during the year numbered 29, which is equal to a fatality rate of 10·0. Among the cases registered as puerperal pyrexia there were 13 deaths, which under the International Classification of Deaths would be tabulated as follows :—Pulmonary Tuberculosis, 5 ; Heart Disease, 1 ; Pneumonia, 3 ; Acute Nephritis, 1 ; Other Maternal Causes, 2 ; All Other Causes, 1.

The combined mortality rate on the 29 deaths from puerperal conditions is therefore 5·8 per cent., compared with 7·9 per cent. for 1944.

## SECTION IV.

## INFECTIOUS DISEASES.

The total number of cases registered for the year 1945 was 31,298, with an additional 2,260 other cases which were ultimately diagnosed as non-infectious. For the preceding year the corresponding figures were 36,556 and 1,939. This considerable reduction is accounted for by the continued low prevalence of scarlet fever, diphtheria and pneumonia, as well as measles and whooping cough. Details of the notifiable and non-notifiable cases, showing those treated in hospital and other institutions, etc., are given in Appendix Table XV. The seasonal prevalence is shown in Appendix Table XVI.

## SMALLPOX AND VACCINATION.

There were two cases of smallpox removed to hospital during the year; both were men returning from military service in the Far East and were removed to the smallpox hospital on the arrival of the vessels in the harbour. Particulars of these cases are given in Section V of this report dealing with the Port Health Authority.

*Smallpox Contacts.*—The usual precautions were taken on board ship with regard to vaccination or re-vaccination of those on board the vessels, and all contacts kept under surveillance for the statutory 14 days as required by the Port Health Regulations. Medical Officers of districts to which contacts were proceeding were notified immediately.

A number of cases of smallpox were removed at other ports on arrival in England, and many contacts disembarking from these ships and returning to Glasgow had also to be kept under surveillance, but no case occurred among them. With the cessation of hostilities, and the large movements of servicemen and civilians, quite a few persons were intimated as arriving by air from places in Europe, Africa and Asia, having come from areas where smallpox and typhus were prevalent.

*Vaccination.*—The following table gives information as to the administration of the Vaccination Acts up to the end of 1944. The information is supplied by the Registrar-General for Scotland. There is again a slight recession in the percentage of children successfully vaccinated, 56·0 compared with 56·7 in 1943 and 60·8 in 1942, when there was an outbreak of smallpox following the arrival of a New Zealand vessel on which a case had occurred. The percentage of children not vaccinated on account of conscientious objection has increased to 22·6 against 18·7 in 1942; before the war the percentage was 41·6.

TABLE SHOWING RESULTS OF PRIMARY VACCINATION OF CHILDREN BORN DURING SEVERAL YEARS.

(From the Detailed Annual Reports of the Registrar-General.)

Year.	Successfully vaccinated. Per cent.	Insusceptible of vaccine disease. Per cent.	Died before vaccination. Per cent.	Conscientious objection to vaccination. Per cent.	Vaccination postponed. Per cent.	Unaccounted for. Per cent.
1906	82·9	0·5	10·6	0·2	0·8	5·0
*	*	*	*	*	*	*
1914	51·7	0·9	12·1	25·1	1·8	8·4
*	*	*	*	*	*	*
1939	39·6	2·3	7·4	41·6	1·6	7·5
1940	43·2	1·8	8·0	36·5	1·6	8·9
1941	50·2	1·9	9·5	30·5	0·4	7·5
1942	60·8	3·3	7·6	18·7	1·7	7·9
1943	56·7	3·5	7·4	22·1	0·4	9·9
1944	56·0	2·8	8·2	22·6	1·2	9·2

During 1945 the number of cases reported by Registrars as not having lodged certificates for conscientious objection to vaccination under the Act was 6,441, against 7,583 for the preceding year. Children vaccinated numbered 1,879, the number postponed was 2,207, and 79 were certified as not susceptible. Medical certificates on behalf of 1,309 children were forwarded to the Department of Health for registration as not fit subjects for vaccination.

The number of children vaccinated at Child Welfare Centres was 3,417, compared with 33,810 during the previous year.

#### TYPHUS FEVER.

No case of this disease occurred in the city during the year. There has been none since 1931; and only 3 cases have been recorded in the past 20 years.

*Murine Typhus.*—One case was admitted to hospital on 23rd June from a ship which had arrived from India as suffering from mite-borne scrub typhus. The patient was a member of the Royal Artillery who left Burma on 14th May and proceeded by air and train to Calcutta, and thence to Bombay, when he boarded the vessel where the diagnosis was made. The military authorities had excluded the possibilities of louse-borne typhus and enteric fever.

The Medical Superintendent of Knightswood Hospital reported that the rash was very profuse with "rose" spots over the trunk and upper parts of the limbs. The rash was fading and some "rose" spots were showing petechia in the centre. There were also rather larger brownish macules. There was no evidence of a primary sore nor of enlargement of the lymphatic glands in the groin or axilla. Head and body were free of vermin.

The Weil-Felix reaction was carried out on 24th June when the patient's serum agglutinated proteus X.19, and reactions against the other proteus antigens were in a very low titre. On this result and the clinical findings the case was placed in the true typhus group. Dr. Anderson, the Medical Superintendent, concludes his report by stating that : "There is no doubt that the incubation period of scrub typhus is rather longer, namely 11 to 21 days, but the date of onset, 9th June, would be quite in keeping with the patient having acquired a flea-borne typhus in the camp at Bombay."

#### TYPHOID FEVER, ETC.

*Typhoid.*—There were only 11 cases, of which 3 were institutional.

All were adults ; and 8 were males. Despite the fewness of the cases every Division except the South-Western was involved. Two deaths from typhoid were registered during the year.

*Paratyphoid.*—There was a slight increase to 27 cases, which included 7 institutional cases. Eleven were children under fifteen years ; and 19 were females. Every Division of the city was involved. There were two deaths.

*Dysentery.*—The unprecedented incidence of the previous year (1,259 cases) was surpassed in 1945. There were 1,474 cases distributed seasonally as follows :—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
Home Infections	242	332	315	339	1,228
Institutional ...	76	85	43	42	246

The incidence was thus high in the city throughout the year and the total of institutional cases can be regarded as gratifyingly low. Two Welfare Department institutions for homeless children provided 79 and 28 cases respectively ; and 46 cases were registered from Stobhill. The remaining institutional cases were derived from twenty-five other institutions. The following table gives the age incidence of the year's cases :—

	—1	—5	—15	—55	55+	Total.
Home Infections	94	577	243	268	46	1,228
Institutional ...	34	120	36	24	32	246

The disease was thus common among infants but remained most frequent in the group aged one to four years. The recent high prevalence of the bacillary dysenteries has led to generally increased vigilance. It is hoped their infectivity will soon be offset also by post-war improvement in hygienic conditions.

*Malaria.*—Cases of malaria, although few, were slightly more numerous than a year ago. There were 25 cases recorded against 16. This increase is not unexpected in view of the increased rate of demobilisation, especially of servicemen from the Middle East, etc., and other malarious areas. It is most notable that the number of cases reported is so small, and this can be ascribed to the suppressive effect of mepacrine, which has almost completely displaced quinine in the treatment of service personnel. In contrast, it should be noted that at the corresponding period after the first Great War, Anti-Malarial Clinics had to be established throughout the city, and there were in 1919 1,428 cases of malaria notified to this Department. The majority of these cases came from Palestine and the Balkans. In 1920 the number of cases reported was 1,064.

Of the cases registered in 1945, 15 were removed to Fever Hospitals while 7 more were treated in other institutions. Of the total cases, 24 were males and 1 female.

## SCARLET FEVER.

The incidence of scarlet fever in the city has remained at the same level as for the preceding year, the total number of cases registered being 3,417 against 3,416. The prevalence of the disease has more or less returned to the average incidence of pre-war years, although the death rate from the disease is only 4 per million of the population compared with 26 to 30 in the years immediately prior to the 1914-18 war. This low mortality is not explained by any change in the age distribution of the cases, which is more or less the same as in 1938 for instance. Almost half the cases occur at the age period 5—10 years, and the females are considerably in excess of the males, although this observation also applies to ages over that period, whereas below 5 years the males are in excess. Most of the deaths occur in the pre-school age. In 1945 there were only 2 male and 2 female deaths, all under 5 years of age.

Of the total cases registered, 2,768 or 80 per cent. were removed to hospital for treatment, the same percentage as for the previous year, whereas in 1938 the percentage so treated was 88. The larger number of cases now treated at home is to a certain extent due to pressure on hospital accommodation for other diseases which are more dangerous to child life. The reduction in the size of family is, of course, also an important factor in this respect, for many cases occur in families where there are only one or two children.

There was no exceptional prevalence of the disease throughout the year, nor in any of the Municipal Wards of the city, where the highest number recorded was 214 in Shettleston, followed by 187 in Ruchill and 182 in Provan, all wards with large populations of young children.

## DIPHTHERIA.

The present wave of diphtheria reached its height in 1940 when 5,190 cases were recorded. The number of cases registered last year was 1,970, compared with 2,377 in 1944 and 2,919 in 1943. Although the total number of cases shows a fall over last year's figures, there was actually a rise during the last quarter of the year. This also applies to the number of deaths, 45 per cent. of which occurred during the last quarter as compared with 25 per cent. during the same period in 1944. The seasonal prevalence is given in Table XVI in the Appendix; although the maximum is usually in October the highest number recorded was 220 in November. Of the total cases all but 9 were treated in hospital.

With regard to the sex ratio, in 1945 there were 833 cases among females to 1,137 males. The following table gives the age distribution of cases of diphtheria compared with earlier years, when the children formed a larger percentage of the total population. The number of children at younger ages now contracting the disease is less than in earlier years :—

			—1	—5	—15	—25	25+
1914	...	...	3.5	38.7	38.3	12.0	7.5
1924	...	...	3.3	35.6	43.1	10.6	7.4
1938	...	...	1.1	27.5	54.4	11.9	5.1
1940	...	...	0.8	28.1	51.1	14.3	5.7
1941	...	...	1.5	27.0	46.0	18.1	7.4
1942	...	...	1.4	26.0	46.9	17.1	8.6
1943	...	...	1.9	26.3	48.8	15.2	7.8
1944	...	...	1.3	26.5	50.2	13.2	8.8
1945	...	...	1.1	29.7	51.8	10.1	7.3

*Diphtheria Immunisation.*—The facilities for diphtheria immunisation which are available are as follows :—

- (1) Thirteen diphtheria immunisation clinics held each Tuesday afternoon in different areas of the city. These deal with children of all ages.
- (2) Immunisation is carried out at all Child Welfare Centres.
- (3) School entrants are offered facilities at their first medical examination.
- (4) Children in day nurseries and nursery schools are immunised on admission.

Birthday letters are sent to the parents of children of one year who have not been immunised. These cases are picked up by the Health Visitors in the course of their visitation. A similar letter is sent to the parents of toddlers known to the Health Visitors to be still unprotected.

In the autumn a new campaign was launched in the schools and sixty schools in which there were a large number of non-immunised children were selected. A joint appeal was made to parents by the Director of Education and the Medical Officer of Health, and arrangements were made for a Medical Officer to visit each school on specified dates. Children under 5 years of age were also allowed to attend. As a result of this, 7,500 children were immunised.

There has been an increase in the number of children under 5 years of age who have been immunised during the year, due to an increase in the number of letters sent by Health Visitors to the parents of unprotected toddlers.

There were 33 deaths from diphtheria during 1945 : all occurring among non-immunised children, 25 of whom were under 5 years of age.

In view of these facts it is disquieting that such a large number of children remain unprotected. Only about 30 per cent. of children under 5 years of age and 60 per cent. of school children are immunised.

Number of Children Immunised in 1944.			Number of Children Immunised in 1945.		
-5	+5	Total.	-5	+5	Total.
8,558	11,277	19,835	11,098	7,499	18,597
Re-inforcing doses...	...	...	65	5,082	5,147
Birthday Letters Issued—					
			1944.	1945.	
Number of birthday letters	...	...	6,300	6,788	
Number of toddler's letters	...	...	4,012	7,054	

As shown in Table IX in the Appendix, most deaths from diphtheria occur under ten years of age. That the youngest children are the most vulnerable is shown in the following table :—

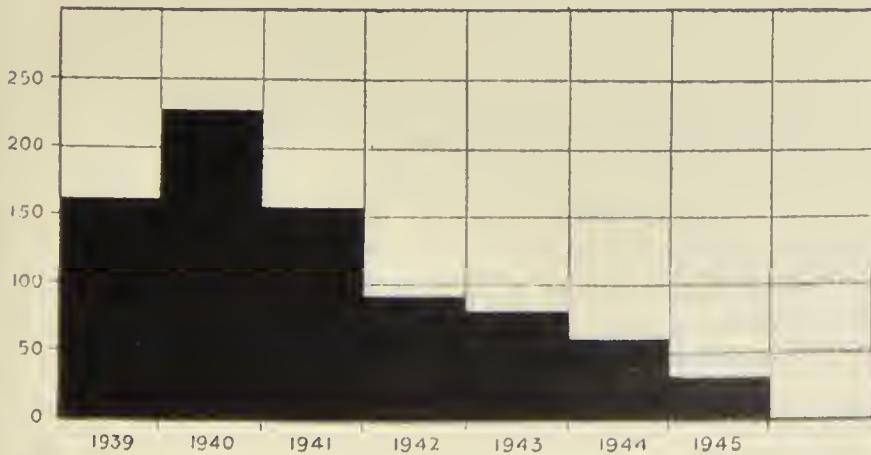
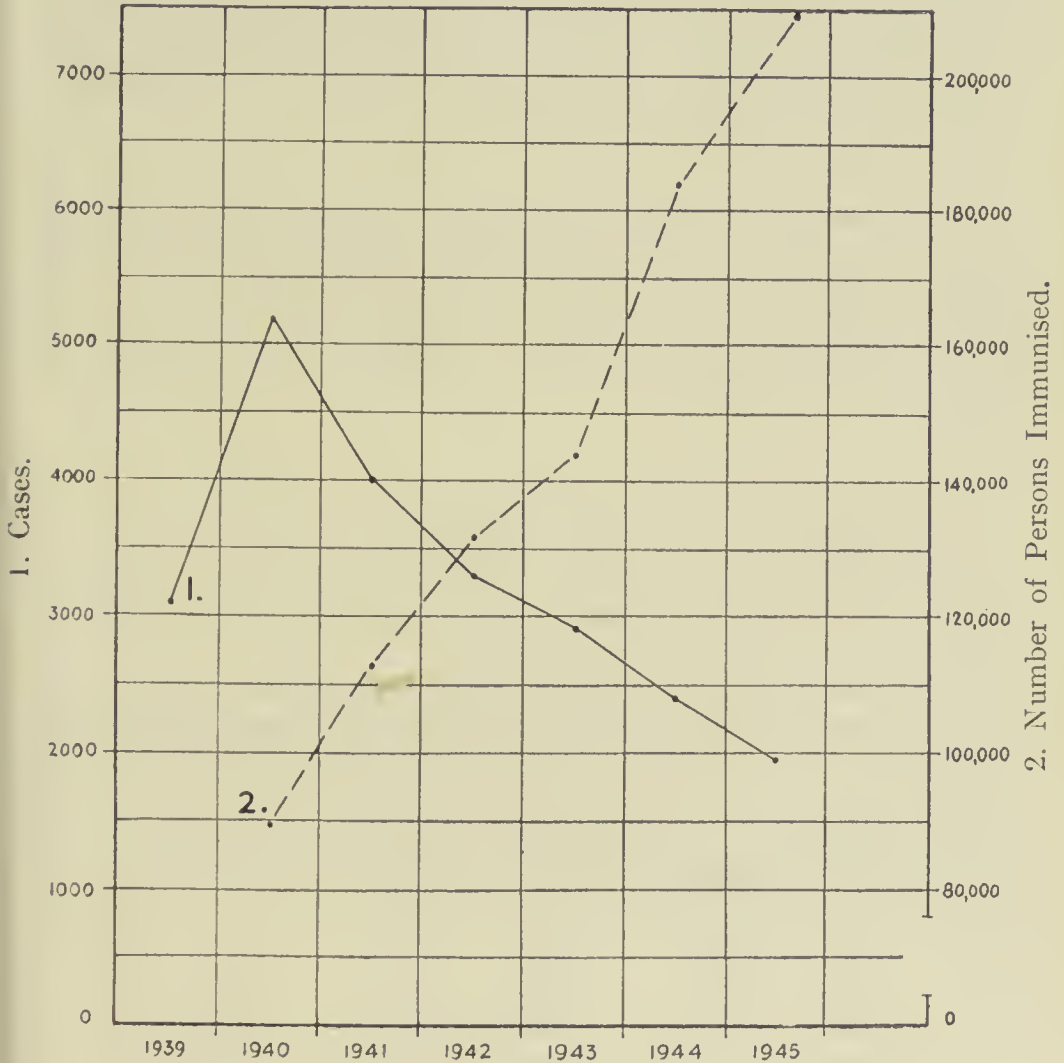
	Case Mortality per cent.						
	Males.	1945. Females.	Total.	Males.	1938. Females.	Both Sexes.	
— 1 year ...	6.3	—	4.5	6.2	26.6	16.1	
— 2 years ...	2.3	5.7	3.8	5.7	19.6	12.1	
— 5 years ...	4.1	4.1	4.1	5.5	8.6	7.0	
— 10 years ...	0.6	1.3	1.0	4.5	5.5	5.0	
— 15 years ...	—	—	—	0.5	2.9	1.9	
15+ years ...	1.1	—	0.2	0.8	0.8	0.8	
	<u>1.8</u>	<u>1.5</u>	<u>1.6</u>	<u>3.8</u>	<u>5.3</u>	<u>4.6</u>	

Now that the scheme for the immunisation of children against diphtheria has become stabilised, it is interesting to record the numbers of children that have been protected by inoculation in diagrammatic form as against the number of cases occurring since the war began. This is shown on the chart on the following page together with the number of deaths. The fatality has been reduced from 4.4 per cent. in



### DIPHTHERIA.

NUMBER OF CASES NOTIFIED EACH YEAR AND IMMUNISED CHILD POPULATION AS AT END OF EACH YEAR.



Number of Deaths.

1940 to 1·7 per cent. in 1945. The reduction, however, has been greater among school children than has been the case among those under 5 years of age. In the case of the school children the number of deaths are only about one-tenth, whereas in 1945 among younger children the deaths were one-fifth, of those occurring at the same age in 1940, i.e., the reduction is in inverse proportion to the percentage immunised.

*Erysipelas.*—The number of cases of erysipelas registered during the year was 525, of which 257 were removed to Fever Hospitals for treatment. The respective figures for the preceding year were 564 and 268. Most of the cases occur at older ages, the highest number being 127 at the age period 45—55, of which 45 were males and 82 females.

The disease is now of little significance so far as infection is concerned and the removal of the cases was on account of the more or less serious nature of their condition or because no adequate facilities were available for medical treatment at home. The mortality is low, only 8 deaths being recorded, which represents a case fatality per cent. of 1·5 against 2·3 in 1938. There was only 1 male death against 7 for females, and all except 1 at ages over 55 years, whereas in 1938 there were 11 male and 11 female deaths. The mortality per million of the population for the past three years may be compared with the pre-war period as follows :—

Year.	Death Rates.	Year.	Death Rates.	Year.	Death Rates.
1943 ...	9	1936 ...	39	1918 ...	21
1944 ...	6	1937 ...	30	1919 ...	33
1945 ...	8	1938 ...	20	1920 ...	59

The following figures show the ratio of females to 100 male cases compared with the pre-war year 1938 :—

				Female Deaths per 100 Male Cases.	
				1945.	1938.
Ages 20-45	...	...	...	261	113
Ages 45 upwards	...	...	...	149	102
Total Cases	...	...	...	178	110

## DISEASES OF THE CENTRAL NERVOUS SYSTEM.

*Cerebro-Spinal Fever.*—The number of cases of cerebro-spinal fever registered during the year was 180, of which 116 were removed to hospital for treatment, and 6 more were dealt with in other institutions. The corresponding figures for the preceding year were 129, 121 and 2 respectively. The following table is again introduced to show a comparison with the heavy incidence of the disease which occurred in the first two years of the war. The total cases, although showing considerable reductions on these years, are still nearly double the annual number in the years before the war.

	CASES.										Mortality per cent.		Death Rates per Million.
	-5		-15		-45		45+		Total.		M.	F.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
1938	22	28	8	5	15	7	1	2	46	42	41·3	45·2	34
1939	23	18	9	12	12	6	1	—	45	36	28·8	16·6	17
1940	125	102	27	36	89	58	14	6	255	202	21·5	18·8	89
1941	100	88	27	28	74	56	19	16	220	188	20·0	21·2	80
1942	46	37	25	18	30	24	9	9	110	88	23·6	27·2	48
1943	42	32	14	5	17	6	3	4	78	47	14·4	27·6	23
1944	38	33	11	9	12	15	5	6	66	63	25·7	17·4	27
1945	52	29	12	6	16	8	2	5	82	48	26·8	18·7	29

Deaths numbered 31, representing a death rate of 29 per million of the population against 27 in 1944 and 23 in 1943.

As usual the prevalence was greater in the first part of the year, 53 of the cases being recorded in the first three months. There was no outbreak of associated cases, the highest number recorded in the wards of the city being 9 in Townhead and a similar number in Hutchesontown.

It is seldom that an instance is recorded of related cases of infection of this disease. On 1st May a Medical Officer reported that a case of cerebro-spinal meningitis had been notified at a small village in his county and that the patient was a contact of a case in Glasgow. On enquiry it was found that a family from the north-western district of the city had been on holiday at the house concerned. There were two boys in the family, one 6 years old, who sickened on 19th April with cerebro-spinal fever, was brought home by the father and admitted to hospital on 20th April, where he died the following day. The other boy, 2 years, was brought home by the mother on 20th April as he had sickened of the disease on the 21st. He was removed to hospital on the 23rd.

The patient at the house in the county was a boy of 3 years, who slept in the same cot with the first Glasgow case for a month, except for the last four days when he slept with his own family in a separate bed. The County Authorities reported that the house was of three apartments and was in good order with a water supply and conveniences. The milk supply was obtained from the home farm which is well kept, although the cows were not tuberculin tested. There were no other cases in the county district.

*Acute Encephalitis Lethargica.*—There were four cases during the year compared with 3 in 1944. The disease has not shown any increased prevalence since 29 chronic cases were recorded in 1937. One case was a male between 35 and 45 years of age. The other three were females, 2 of them over 55 years of age.

*Acute Poliоencephalitis.*—There was no case of the disease recorded during the year.

*Post-Encephalitis Lethargica.*—The last survey of the cases of post-encephalitis lethargica in the city was made in 1938, and at that time there were 235 cases, of whom 126 were males and 109 females.

The original epidemic which produced most of these cases occurred in 1923 and 1924, since when only sporadic cases of the disease have appeared in the city. Recently a survey of the cases was made and the total is 150, of whom 74 are males and 76 females.

The following table shows age distribution of the cases :—

Age.		Males.	Females.	Total.
—30 years	... ..	6	11	17
—40 years	... ..	32	28	60
+40 years	... ..	36	37	73
		<u>74</u>	<u>76</u>	<u>150</u>

The physical condition of the patients can be inferred from the following table :—

	Males.	Females.	Total.
Fit for housework	—	18	18
Fit for employment	20	11	31
Unfit but going about	25	14	39
Bedridden at home	6	8	14
Cases in General Hospital	14	17	31
Cases in Mental Hospital	9	8	17
Total	<u>74</u>	<u>76</u>	<u>150</u>

Two wards in Stobhill Hospital, one for males and one for females, are still occupied by cases of post-encephalitis lethargica, and many of these cases have been there for several years. In the male ward there are 39 patients and in the female ward 43 patients. It should be noted that some of these cases are from other local authorities.

The group of cases, originally numbering 70, which has been under the continuous supervision of Dr. Ashie Main of this Department since 1923, now numbers 27. This is only 3 cases less than in 1938, which shows the very low mortality rate among the survivors of the 1923-24 outbreak.

The condition of Dr. Ashie Main's cases in the Spring of 1946 is shown in the following table :—

Group I.—Recovery complete : 4 cases.

Group II.—Recovery incomplete : Mental retardation, 2 cases ; mental instability, 1 case ; nervous instability, 12 cases ; physical defect and mental instability, 1 case.

Group III.—Perversion of conduct : 1 case.

Group IV.—Parkinsonians : Normal mentality, 2 cases ; abnormal mentality, 5 cases.

None of this group died between 1938 and the present time, but 2 of the cases have not been traced.

*Acute Poliomyelitis.*—The number of cases registered during the year was 7, 5 of which were treated in hospital. The corresponding figures for the previous year were 24 and 22 respectively. All but one of the cases occurred at ages under 15 years and 4 were males and 3 females. In no ward was there more than 1 case.

## MEASLES.

For the fourth year in succession measles was prevalent in the late spring and early summer months of the year. Although the disease is not compulsorily notifiable, many cases are brought to notice by the attendance officers of the Education Department, while a considerable number of other cases are discovered in houses in the same tenements where school children have contracted the infection. Altogether there were registered 6,012 cases against 6,364 in 1944. Of the total cases registered, 702 were removed to hospital and 2 more dealt with in other institutions. All but 193 cases were under 10 years of age. More than a third of the cases under 1 year and more than a

quarter of the cases between 1 and 2 were removed to hospital because they could not be properly isolated or treated at home; it has become the policy of this Department to remove as many of these young children as possible, for it is at these ages that the heaviest death rate occurs. In 1945 9 of the male deaths were under 1 and 2 between 1 and 2, while the corresponding figures for females were 4 and 3. All the deaths occurred under 5 years.

The death rate from the disease, although a little higher than that for previous years, was still low, 23 per million of the population, and this to a certain extent is due to the relatively limited prevalence of the disease at a time of the year when complications are less frequent. This is shown in the following table, which gives the annual recurring prevalence of small magnitude compared with the bi-annual prevalences of large magnitude in the pre-war years:—

			Cases.	Deaths.	Mortality per cent.
1939	...	...	1,462	2	0.1
1940	...	...	11,028	97	0.9
1941	...	...	1,613	11	0.7
1942	...	...	8,303	65	0.8
1943	...	...	7,843	31	0.4
1944	...	...	6,364	16	0.3
1945	...	...	6,012	24	0.4

The disease was more or less prevalent throughout the city. The greatest number was registered in Provan Ward, 403, followed by Dal-marnock with 319 and Pollokshields with 309. The seasonal prevalence of the disease is given in Appendix Table XVI.

*Rubella.*—A prevalence of this mild disease was again recorded, only 591 against 718 for the previous year. The cases removed to hospital numbered 66. The age constitution of the cases and their distribution throughout the city were more or less similar to those of measles.

### WHOOPIING COUGH.

Whooping cough was more or less prevalent during the same period as that of measles, but there was less than half the volume of cases. The number registered was 2,775 against 3,690 in 1944. Of the total cases, 185 were removed to hospital for treatment compared with 269 during the preceding year, as shown in Appendix Table XV. The seasonal prevalence is given in Appendix Table XVI, which shows that the largest number recorded was in January, 530, and that 90 per cent. of the cases occurred in the first half of the year.

Whooping cough is usually more fatal than measles, and with less than half the number of cases there were 35 deaths against 24 from measles. The mortality from the disease has, however, been relatively low during the past two or three years; in 1945 the death rate was 33 per million of the population against 34 for the preceding year. In 1941 the rate was as high as 274. All the 18 male deaths occurred in children under 5 years of age, half of them in the first year of life, while only 1 of the 17 female deaths was older than 5 years.

Half the total number of cases registered were under 5 years of age, and most of the other half occurred between 5 and 10 years of age. The mortality in the first year of life was 6 per cent. against 1.2 for all cases of whooping cough. The disease was most prevalent in the industrial wards to the south of the Clyde, although the highest number registered was 171 in Pollokshields.

*Chickenpox.*—Chickenpox is quite an innocuous disease and it is seldom that a death is recorded from it. The cases registered, however, are always numerous, and in 1945 there were 5,272 against 7,515 in 1944. Cases removed to hospital numbered 278, mostly from small houses where the conditions were unsuitable, or there was some complication, such as pneumonia, etc. With the exception of a few cases all were children, but the proportion of children over 10 years was higher than was the case with measles and whooping cough. The highest number recorded was 278 in Provan, followed by 254 in Cowcaddens and 249 in each of Shettleston and Parkhead Wards. As shown in Table XVI, nearly 4,187 of the cases occurred in the first half of the year.

*Diarrhoea and Enteritis.*—The mortality from diarrhoeal diseases under 2 years of age was considerably less, there being 385 deaths against 701 in 1944, when there was an exceptional prevalence of the disease among young children, as described in the report for last year. The death rate per million of the population was 367 compared with 668 in 1944 and 323 in 1943.

Of the 363 deaths in the first year of life, 225 were males and 138 females. The male deaths form 60 per cent. of the total against 62 per cent. for the preceding year. The proportion of males is always considerably in excess of the females, apparently a biological difference. In former years diarrhoeal deaths were always definitely more numerous during the warm months of the early autumn, and this was to some

extent contributed to by the prevalence of flies associated with stables, middens, etc. The more universal use of motors and the replacing of ash-pits by ash-bins has probably lessened the mortality from the disease, but it is still relatively heavy and as already mentioned was exceptionally so in 1944. The following table shows the number of deaths under 1 year in each month of the year against the mean temperature compared with the corresponding figures for the previous year :—

NUMBER OF DEATHS UNDER 1 YEAR ACCORDING TO MONTH OF DEATH.

	1945.		1944.			1945.		1944.	
	Deaths	Temp.	Deaths	Temp.		Deaths	Temp.	Deaths	Temp.
January	25	31.1	27	40.7	July ...	12	60.6	43	59.7
February	22	41.9	29	38.2	August	29	59.6	49	59.8
March	24	46.0	44	41.3	Sept.	60	56.4	116	51.4
April	24	47.3	61	47.5	October	58	50.7	61	46.1
May	28	50.8	43	50.3	Nov.	42	43.9	33	39.9
June	16	56.0	35	55.5	December	23	39.3	28	38.0

*Acute Infective Jaundice.*—Four cases of this disease occurred in 1945. One, a ship's caulker, after removal to hospital as a case of pneumonia, reacted positively to the Schuffner Test for leptospira icterohaemorrhagiae. His illness had developed a few days after his return from a holiday camp on the Clyde coast. The camp water supply was obtained by piping a stream to which cattle had access and near which a rat had been seen by the campers. Date of sickening ruled out the possibility of the infection having been acquired in the shipyard.

The second case, employed as a tripe cutter in a Glasgow slaughterhouse, had received a wound of the thumb a week or two prior to his illness. Rats were present in the tripery, and while this was the first case of the disease to occur since 1943, four cases had occurred in the previous six years.

A Glasgow man employed as sewerer with Clydebank Corporation was admitted to the Western Infirmary where his illness was diagnosed as infective jaundice. On his removal to Knightswood Hospital this diagnosis was bacteriologically confirmed.

The fourth case was also a sewerer, employed just prior to his illness in scouring sewers and scraping the brickwork. A workmate in the same squad had also contracted the disease earlier in the year.



*Scabies.*—The incidence of scabies reached its peak in 1942 and in that year the campaign against the disease was fully organised. Since that year the incidence of the disease has steadily declined. The total number of infected families brought to the notice of the Public Health Department was 10,441 in 1943, 7,983 families in 1944, and during 1945, 5,888 infected families were notified. In all probability this decline in incidence will be continued throughout 1946, as family life tends to become more stabilised since the cessation of hostilities. The total number of new cases from the infected families during 1945 was 12,093, compared with 15,528 in the previous year. These families have been evenly distributed throughout the more densely populated areas in the city. Most of the cases are notified to the Public Health Department through the Education Health Services and by private practitioners.

During the year, eighteen Health Visitors have been employed in visiting the infected homes, making approximately 3,500 visits monthly. The visiting staff were also engaged at afternoon and evening scabies treatment centres and, when pneumonia and gastro-enteritis were prevalent, they visited the homes of children suffering from these diseases.

In 1943 there were eleven scabies centres in the city, each holding three sessions daily, the evening sessions at each being for workers, male and female. The number of centres has now been reduced to four, and these are for the treatment of adults and children of pre-school age. There are in addition, however, eight school clinics with bathing facilities where school children suffering from scabies are treated.

#### TRACHOMA.

During the past six years only skeleton reports have been included with regard to the incidence of trachoma and the operation of the scheme for the care of patients suffering from trachoma. It is now proposed to bring the tables, last published in 1938, up to date and to show the variations that have occurred during the war years.

The number of definite cases of trachoma on the register at the end of 1938 is 137, a further 13 cases being considered doubtful. The following table shows the numbers on the register during the past eight years :—

## NUMBER OF CASES ON TRACHOMA REGISTER.

Year.				Number of Definite Cases.	Number of Doubtful Cases.	Total on the Register
1938	...	...	...	137	13	150
1939	...	...	...	134	11	145
1940	...	...	...	136	6	142
1941	...	...	...	142	4	146
1942	...	...	...	139	8	147
1943	...	...	...	140	6	146
1944	...	...	...	142	6	148
1945	...	...	...	145	6	151

The total number of notifications received during the year 1945 was 13, all definite cases. The number of new cases of trachoma notified since 1938 is shown in the following statement.

TABLE SHOWING NUMBER OF NEW CASES OF TRACHOMA NOTIFIED FROM 1938-1945.

Year.			Number of New Cases.	Definite.	Doubtful.	Not Trachoma.
1938	...	...	15	12	1	2
1939	...	...	10	9	1	—
1940	...	...	8	7	1	—
1941	...	...	10	10	—	—
1942	...	...	10	8	2	—
1943	...	...	4	4	—	—
1944	...	...	12	12	—	—
1945	...	...	13	13	—	—

During the year 1945, ten cases were removed from the register for the following reasons:—dismissed cured, 1; removed, leaving no address, 9. Every endeavour was made to obtain the attendance of home contacts of new cases at the dispensary. A total number of seven contacts were examined during the year 1945 and amongst those four definite cases of trachoma were discovered and three were negative. The number of home contacts of trachoma, together with those found to be suffering from trachoma, examined by the consulting ophthalmologist at the clinic for the past eight years is shown below:—

NUMBER OF HOME CONTACTS OF TRACHOMA EXAMINED AT THE CLINIC.

Year.	Examined.	Positive.	Doubtful.	Conjuncti- vitis.	Negative.
1938	24	3	3	3	15
1939	8	—	—	3	5
1940	8	—	—	3	5
1941	14	—	—	6	8
1942	8	—	—	5	3
1943	8	—	—	2	6
1944	12	5	—	—	7
1945	7	4	—	—	3

*Trachoma Dispensary.*—The trachoma clinic was attended by 136 patients during 1945, the total number of attendances being 2,664, of which 566 were consultations with the ophthalmic surgeon and 2,098 were for treatment by the nurse. Of the 136 patients attending the dispensary, 124 came from the city, two resided beyond the boundary, three were not yet notified and seven were contacts, four of whom were Polish soldiers and were found to be positive.

TABLE SHOWING THE NUMBER OF ATTENDANCES AT THE TRACHOMA DISPENSARY DURING THE YEARS 1938-1945.

Year.	Consultations.	Treatment.	Total.	Number of Cases Attending.
1938 ...	1,139	2,245	3,384	128
1939 ...	962	1,660	2,622	143
1940 ...	700	1,481	2,181	133
1941 ...	576	1,604	2,180	134
1942 ...	439	1,369	1,808	125
1943 ...	360	1,486	1,846	129
1944 ...	467	1,433	1,900	134
1945 ...	566	2,098	2,664	124

*Hospital Treatment.*—During the six years ended 1945, 57 cases of trachoma were admitted to Stobhill Hospital. In the more acute cases admitted it was found that expression of the follicles combined with administration of sulphonamide drugs has resulted in improvement and in clearing up the condition as compared with previous treatment. During the six years 23 operations were performed :—

Cauterisation with phenol iod. ...	...	...	...	8
Entropion ...	...	...	...	9
Expression of Follicles ...	...	...	...	5
Electrolysis ...	...	...	...	1

It was found that when patients were persuaded to enter hospital their condition greatly improved owing to the constant and regular applications of the various remedies or the operative procedure found necessary.

*Rabies.*—No case of rabies is known to have occurred, but a number of persons bitten by dogs were reported by the police for inquiry. These are shown in relation to the season of occurrence and the severity of the bite :—

	Slight.	Serious.
1st Quarter ...	46	1
2nd Quarter ...	72	1
3rd Quarter ...	97	1
4th Quarter ...	52	1
	<hr/> 287	<hr/> 4
	} 291	
	<hr/>	
1944 ... 287	1943 ...	314

## RESPIRATORY DISEASES.

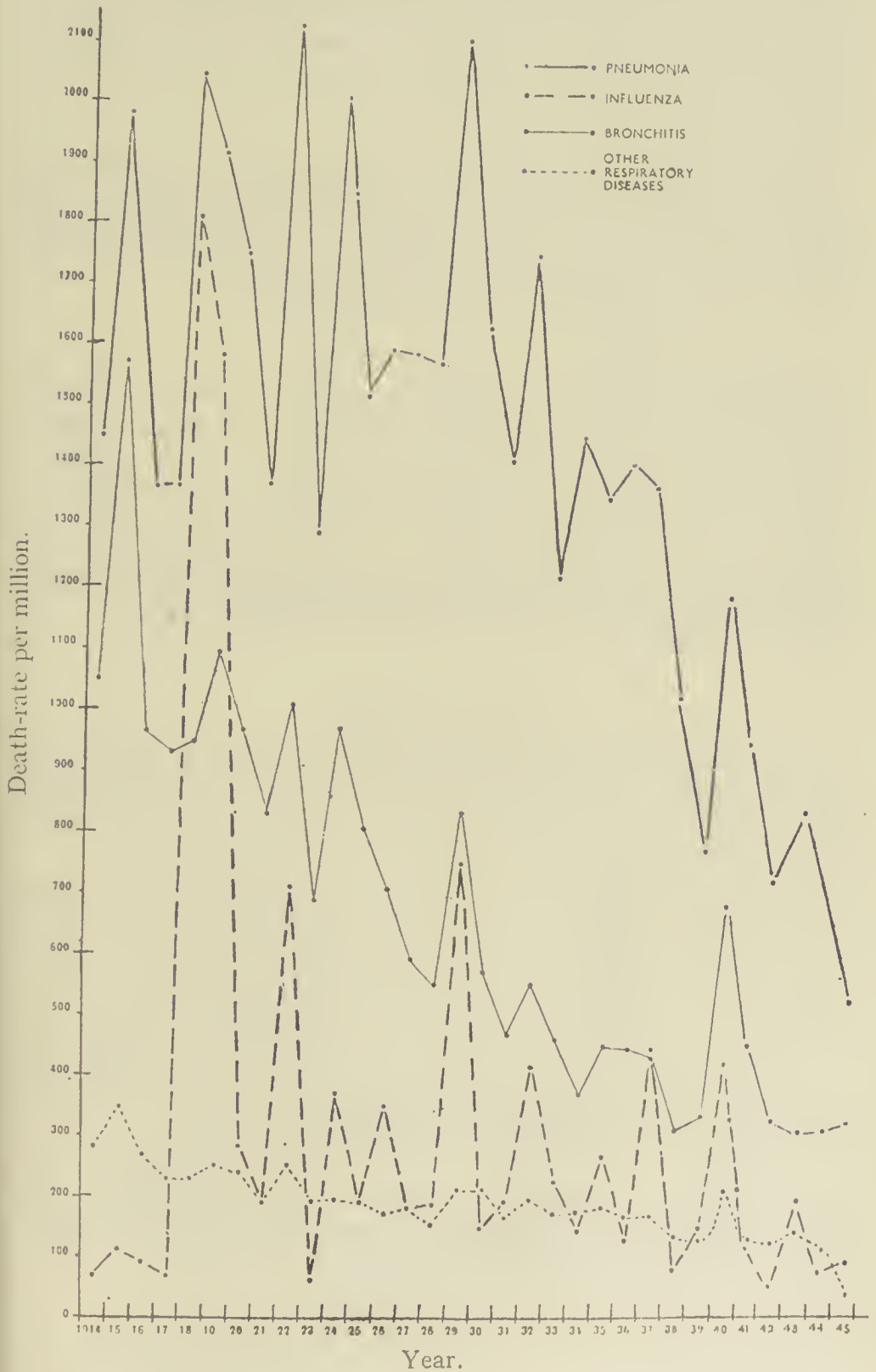
*Pneumonia and Influenza.*—Pneumonia of the influenzal type has not been present in the city, except in minor outbreaks, since 1932. The last minor prevalence occurred in 1943, but it was also more prevalent in a somewhat heavier degree in 1940. In 1945 mortality from respiratory diseases was the lowest on record, the death rate per million from all forms of the disease being 988 compared with 1,201 for the preceding year, and 1,485 in 1943. Some part of this reduction is due to the mildness of the winter months, except for a short period in January. Modern bio-chemical methods of treatment have also contributed to the lower mortality, but it is also probable that pneumococcal and streptococcal infections have been less virulent. This tendency has also been more or less evident in the reduction in hæmolytic streptococcal infections coincident with the reduction in the incidence and fatality of scarlet fever, erysipelas and puerperal diseases.

Dealing with the principal diseases within the respiratory group, the following summary shows the reduction in the influenzal death rate from 75 in 1944 to 44 in 1945.

Mortality from bronchitis has remained more or less uniform except during the severe winters of 1941 and especially 1940, when the temperature reached the lowest level for many years. Mortality from pneumonia has continued to fall during the past 20 years. The rate per million of the population in 1945 was 529, which is the lowest hitherto recorded. The following table shows the death rates for the principal causes in the respiratory group since 1940 :—

	1945.	1944.	1943.	1942.	1941.	1940.
Influenza ...	44	75	196	53	119	431
Bronchitis ...	324	312	306	339	458	680
Pneumonia ...	529	696	840	731	961	1,197
Others ...	91	118	143	133	134	204
	<u>988</u>	<u>1,201</u>	<u>1,485</u>	<u>1,256</u>	<u>1,672</u>	<u>2,512</u>

GLASGOW: Chart showing Death-rates per million from RESPIRATORY DISEASES 1914-1945.



Comparison of these groups is shown in diagrammatic form in the chart on the previous page. This shows the general downward trend of all respiratory diseases, although there are marked fluctuations, especially in the early years when influenza and influenzal pneumonia occurred in epidemic form, usually over short periods of 4-8 weeks in the early months of the year.

Age distribution of the deaths from pneumonia are given in Appendix Table IX. Male deaths numbered 326 and females 229, the heaviest mortality occurring in the first year of life, 99 male infants and 66 females. Mortality remains low until about 40 years of age, when there is a progressive increase towards old age.

The seasonal incidence of cases of acute primary pneumonia and acute influenzal pneumonia is given in Appendix Table XVI. The heaviest incidence of the two diseases is in January and the early spring months, and again in December. The total cases of pneumonia registered was 4,876, of which 2,547 were removed to Fever Hospitals and 1,216 to other institutions, mainly the General Hospitals under the administration of this Department. The corresponding figures for influenzal pneumonia were 78, 33 and 25 respectively. Comparisons with the previous year are given in Appendix Table XV.

### TUBERCULOSIS.

The number of cases of pulmonary tuberculosis notified during 1945 was 2,641, 117 less than in the year 1944. The notifications during the past few years are as under :—

1934-39	...	...	...	1,650 (average)
1940	...	...	...	1,908
1941	...	...	...	2,066
1942	...	...	...	2,324
1943	...	...	...	2,778
1944	...	...	...	2,758
1945	...	...	...	2,641

During the year five hundred and fifty-five cases of non-pulmonary tuberculosis were notified, a decrease of 116 from 1944.

The trend is encouraging in that it suggests a material decrease in the incidence of both pulmonary and non-pulmonary tuberculosis beginning in 1944 and continuing in 1945.

The number of cases notified in the 5-15 age group rose during the year from 262 to 276 while in the age group 15 to 25 years the number of cases in respect of males fell from 439 to 381 and in the case of females the figure is 645 as against 637 in 1944. It is noted that the high incidence amongst females still continues.

During the year, 1,085 persons died of pulmonary tuberculosis as compared with 1,134 in the previous year. There were 262 deaths from non-pulmonary tuberculosis as against 293 in 1944. In addition, 67 registered cases died from causes other than tuberculosis. The following table gives a comparison of the various forms of non-pulmonary tuberculosis notified during recent years :—

			Involvement of Bones or Joints.	Involvement of Meninges.	Other Non- Pulmonary Forms.	Total.
1930	...	...	254	214	579	1,047
1935	...	...	181	140	353	674
1940	...	...	208	189	272	669
1941	...	...	223	182	256	661
1942	...	...	211	192	311	714
1943	...	...	206	196	333	735
1944	...	...	234	171	266	671
1945	...	...	174	140	241	555

The most important feature of this table is the fall in new cases of bone and joint disease, the reason for which is not obvious at present. The fall in meningeal tuberculosis continues and the figure has now reached the pre-war level.

The number of cases of pulmonary tuberculosis on the register at 31st December, 1945, was 8,782, of which 3,389 had tubercle bacilli in the sputum, while there were 2,280 cases of non-pulmonary tuberculosis also on the register.

At the end of the year, there were 1,761 tuberculosis patients occupying beds in Corporation and other hospitals, as compared with 1,972 in December, 1944. The reduction of 211 beds is caused entirely by the difficulty in obtaining nursing staff, a difficulty which has been experienced throughout the country. Until such time as it is possible to recruit sufficient nurses to fully staff the beds in the various hospitals, the waiting list for admission to hospital will continue to remain high. The following table shows the position as at the end of the year :—

		Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Total.
Under 5 years	...	33	20	53
5-15 years	...	50	43	93
Over 15 years	...	918	28	946
		<hr/> 1,001	<hr/> 91	<hr/> 1,092

The pavilion at Belvidere Hospital for the treatment of pulmonary tuberculosis was opened on 16th October, 1945, and is already making its contribution to the solution of the hospital problem.

Of the 2,641 cases of pulmonary tuberculosis notified during the year, 135 were from death certificates, while 342 were received from Service Authorities in respect of Service men and women discharged on account of tuberculosis.

The Tuberculosis Dispensaries are still overworked. They continue to carry out special examinations on behalf of the medical boards under the National Service Acts as well as other special reports in connection with the Ministry of Pensions and the Scheme for Rehabilitation of Disabled Persons. The number of sessions held during the year was 1,199. The primary attendances were 7,647 and the subsequent attendances 52,897. There were 66,898 domiciliary visits by the health visitors.

Of the total number of cases of pulmonary tuberculosis on the register at the end of the year, 828 were in the age group 5-15 years but of these only 39 had positive sputa. As in previous years 70 per cent. of the total female notifications were for patients between the ages of 15 and 35 years, while the corresponding figures for males was less than 50 per cent.

*Tuberculosis Allowances Scheme.*—The special scheme of allowances to certain types of tuberculous patients continues in operation. The total number of persons eligible for these grants from its inception till 15th May, 1946, was 2,064. The position at 31st May, 1946, is set out in the following table :—

Number of persons to whom allowances are payable	878
Number of persons to whom allowances ceased to be payable on recovery	817
Number of persons to whom allowances ceased to be payable on death	145
Number of persons to whom allowances ceased to be payable on account of receiving pensions, failing to continue treatment, etc.	224
Total applications granted	2,064
Weekly amount of allowances being paid	£839 7 4
Total amount of allowances paid from 16th May, 1945, to 15th May, 1946	446,070 4 1

The above figures apply to patients with pulmonary tuberculosis only and it will be noted that in 817 cases the allowances ceased to be payable on the recovery of the patient and the resumption of full-time employment. The allowances are paid fortnightly in advance and are sent to the patient by registered post.



## HOSPITAL TREATMENT.

The following table shows the number of patients in hospital at 31st December, 1945, distinguishing between pulmonary and non-pulmonary tuberculosis. The purpose of this table is to show the approximate number of beds available in Corporation hospitals, other hospitals, and the Government emergency hospitals.

## PATIENTS IN HOSPITAL AT 31ST DECEMBER, 1945.

(a) *Pulmonary Tuberculosis.*

	ADULTS.			CHILDREN.			Grand Total.
	Males.	Females.	Total.	Males.	Females.	Total.	
<i>Corporation Hospitals—</i>							
Robroyston	123	183	306	7	9	16	322
Ruchill ...	68	158	226	6	24	30	256
Knightswood	55	—	55	12	1	13	68
Mearnskirk	89	30	119	76	42	118	237
Stobhill ...	36	9	45	6	4	10	55
Southern							
General	1	12	13	—	—	—	13
Foresthall ...	16	5	21	—	—	—	21
Bellefield							
Sanatorium	—	72	72	6	30	36	108
Belvidere ...	—	22	22	6	—	6	28
	<u>338</u>	<u>491</u>	<u>879</u>	<u>119</u>	<u>110</u>	<u>229</u>	<u>1,108</u>
<i>Other Hospitals—</i>							
Bridge of Weir	5	7	12	—	—	—	12
Ochil Hills	13	—	13	—	—	—	13
Lanfine Home	8	8	16	—	—	—	16
<i>Emergency Hospitals—</i>							
Bangour ...	40	24	64	—	1	1	65
Bridge of Earn	73	5	78	2	—	2	80
Law Junction	—	85	85	—	1	1	86
	<u>139</u>	<u>129</u>	<u>268</u>	<u>2</u>	<u>2</u>	<u>4</u>	<u>272</u>
Totals	<u>527</u>	<u>620</u>	<u>1,147</u>	<u>121</u>	<u>112</u>	<u>233</u>	<u>1,380</u>

(b) *Non-Pulmonary Tuberculosis.*

<i>Corporation Hospitals—</i>							
Robroyston	68	74	142	9	17	26	168
Mearnskirk	3	3	6	38	30	68	74
<i>Other Hospitals—</i>							
Philipshill ...	3	2	5	6	3	9	14
Bangour ...	—	6	6	4	4	8	14
Millport ...	2	1	3	48	28	76	79
Strathblane	—	—	—	6	3	9	9
Larbert ...	19	—	19	4	—	4	23
Totals	<u>95</u>	<u>86</u>	<u>181</u>	<u>115</u>	<u>85</u>	<u>200</u>	<u>381</u>
Grand totals	<u>622</u>	<u>706</u>	<u>1,328</u>	<u>236</u>	<u>197</u>	<u>433</u>	<u>1,761</u>

The following table shows that the number of patients under treatment at the end of 1944 was 1,972, as compared with 1,545 in 1937, and the total number of patients treated during 1945 was 4,794 as compared with 5,054 in 1944 and 4,258 in 1938. The decrease of 260 patients treated during the year is accounted for in the main by the reduction in the number of beds available at Robroyston Hospital from 610 to 470 due to lack of nursing staff. Other hospitals also contributed to this decrease but in a lesser degree.

*Comparative Statement of Cases Treated in Hospital during the years 1938-1945.*

*All Forms of Tuberculosis.*

Year.	No. of Patients remaining in Hospital at end of previous year.	No. of Patients admitted.	Total number of Patients treated during year.
1938	... 1,545	2,713	4,258
1939	... 1,588	2,593	4,181
1940	... 1,374	2,414	3,788
1941	... 1,588	2,561	4,149
1942	... 1,650	2,733	4,383
1943	... 1,791	3,140	4,931
1944	... 1,921	3,133	5,054
1945	... 1,972	2,822	4,794

Finally, the following table is intended to show the number of patients treated in hospital during 1945. It is seen from the table that the average period of treatment of cases of pulmonary tuberculosis is approximately six months and that a period of over one year is required for the treatment of an average case of non-pulmonary tuberculosis.

*Cases Treated in Hospital during 1945.*

	Pulmonary Tuberculosis.			Non-Pulmonary Tuberculosis.			Grand Total.
	Males.	Females.	Total.	Males.	Females.	Total.	
In hospital at 31st December, 1944	742	810	1,552	235	185	420	1,972
Admitted ...	1,140	1,348	2,488	187	147	334	2,822
Total treated during year ...	1,882	2,158	4,040	422	332	754	4,794
Dismissed ...	962	1,198	2,160	192	146	338	2,498
Died ...	272	228	500	20	15	35	535
Total remaining at 31st Dec., 1945	648	732	1,380	210	171	381	1,761

### OUT-PATIENT TREATMENT BY ARTIFICIAL PNEUMOTHORAX.

This arrangement, first introduced in 1943 and designed to provide early treatment for suitable cases of pulmonary tuberculosis on the hospital waiting-list, was continued during 1945 on the same lines as those already described. Unfortunately, shortage of nursing staff caused considerable difficulty and for a time the scheme had to be suspended. In consequence, the number of patients admitted showed a marked decline from 1944. Apart from this difficult period, however, full advantage was taken of the facilities for treatment provided, and during November 14 patients were admitted for induction, the highest total for any month since the inception of the scheme.

During the year, 63 patients were admitted for treatment. Of these, 46 (or 73 per cent.) responded satisfactorily and were still attending for refills at the end of the year. In 17 cases (or 27 per cent.) treatment was unsuccessful, either from failure to obtain a collapse or from poor response to treatment following an incomplete collapse, and these patients were recommended for further treatment in hospital.

It is satisfactory to note that during 1945 there was no case of failure due to default.

### SURGICAL TREATMENT IN RUCHILL HOSPITAL.

The surgical work at Ruchill Hospital during the past few years has been increasing to such an extent that it was felt that a new chest surgical unit required to be established, and plans for the opening of such a unit in Mearns Kirk Hospital were passed by the Corporation. It is hoped to have the new unit in full operation before the end of 1946.

	Number of Operations.
Adhesion Section ... ..	164
Phrenic crush ... ..	139
Thoracoplasty ... ..	93 (52 patients)
Lobectomy ... ..	11
Bronchoscopy ... ..	17
Rib resection for Empyema ... ..	11
Thoracotomy for inoperable Neoplasm ... ..	3
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## SURGICAL WORK AT ROBROYSTON HOSPITAL.

*Non-Pulmonary Tuberculosis—*

SITE OF LESION.	Number of Operations
Tuberculosis of spine ... ..	5
Tuberculosis of hip ... ..	3
Tuberculosis of bones other than spinal ... ..	4
Tuberculosis of joints other than hip ... ..	19
Genitourinary tuberculosis ... ..	101
Abdominal tuberculosis ... ..	1
Tuberculosis of lymphatic nodes ... ..	4
Multiple and miscellaneous lesions (tuberculous) ... ..	4
Non-tuberculous lesions ... ..	14

*Pulmonary Tuberculosis—*

(Thoracoplasty, endoscopic pneumolysis, etc.) ... ..	258
Total ... ..	<u>413</u>

## BAIRD STREET ACTINOTHERAPY CLINIC.

There were 215 patients on the roll of this clinic at the end of 1945, compared with 210 at the end of 1944. During 1945, 199 patients were dismissed. The results of treatment in these cases are summarised in the following table:—

	Number of Patients.			Average duration of treatment in months.		
	Healed.	Improved.	Not Improved.	Healed.	Improved.	Not Improved.
Superficial						
Adenitis ...	77	36	11	8.1	7.1	3.6
Lupus Vulgaris	6	8	6	19.8	16.3	17.3
Abdominal						
Tuberculosis	16	7	6	6.8	4.4	1.8
Bone & Joint						
Tuberculosis	5	4	1	7.6	5.0	1.0
Other Tubercular						
Conditions	7	5	1	8.0	12.4	2.0
Miscellaneous	2	1	—	9.0	1.0	—
	<u>113</u>	<u>61</u>	<u>25</u>			

The results in 25 other cases in which the period of attendance was less than one month are excluded from the table.

During the year, 53 patients attended the special clinic for lupus cases on 2,242 occasions and received in the aggregate 3,875 hours of treatment from the Finsen-Lomholt lamps. Eight of these were dismissed, three being regarded as "healed" after an average period of 25 hours treatment, four regarded as "improved" after an average of 226 hours treatment, and one as "not improved" after 145 hours treatment; the last five mentioned patients all took their own discharge.

It is pleasing to record the advent of a new method of treatment of lupus vulgaris which is giving good results, namely, the use of calciferol in high doses by mouth. The rationale is not quite clear, but it is well to recall that one of the main effects of ultra-violet rays on the skin is to promote production of the substance which is now known as calciferol and it has been widely accepted that the value of U.V.R. treatment in tuberculosis has been associated with this action of the rays: further, cod liver oil is almost a traditional adjunct in the treatment of tuberculosis, and one of the principal vitamins in cod liver oil is calciferol. About 30 lupus patients at Baird Street are at present given calciferol in doses of 50,000 units thrice daily, and it is gratifying that in most of these a considerable improvement can be detected in the appearance of the diseased tissue. Moreover, the treatment gives good promise of controlling just the type of case in which our Finsen-Lomholt lamps cannot be used with advantage, that with extensive lesions on the trunk and limbs. As with most methods of treatment of lupus, an excessive reaction in the lesion is to be expected sooner or later, and this would appear to be a deterrent to its use in cases of tuberculosis involving other tissues than the skin. It is quite possible that if a method can be found of assessing the dosage which is the optimum for the disease in any particular patient, the treatment may yet become available for tuberculosis elsewhere in the body.

#### FLORENCE STREET (GORBALS) X-RAY CLINIC.

In May, 1945, the staff of this clinic was increased from one to three persons, two Sister-radiographers and a typist, all employed on a full-time basis. In June, a further expansion of work was undertaken when cases from the tuberculosis clinic of the Eastern Division were diverted to Florence Street from the Ruchill Department where they had been previously X-rayed. Since then, therefore, the Florence Street unit has been acting as the X-ray centre for all cases from the South-Western and South-Eastern Divisions, for most cases from the Eastern Division, and for all cases from the Burgh of Rutherglen.

This continued expansion of work is shown by a further large increase in the number of patients dealt with in 1945. The total number of patients X-rayed during the year was 7,738, compared with 4,675 in 1944.

Cases from tuberculosis clinics numbered 6,734. Those sent from ante-natal and child welfare clinics numbered 544, and from school clinics 53, while the remaining 407 were sent by the Burgh of Rutherglen.

## MASS RADIOGRAPHY UNIT.

During 1945, the Mass Radiography Unit was in operation partly at its Centre and partly at other premises, visits being paid to the Scottish Co-operative Wholesale Society's factories at Shieldhall and Morrison Street, the shipyard of Messrs. Alexander Stephen & Sons, Linthouse, Thomson Street School and Govan Town Hall; the last two centres were used particularly for the examination of school children in the east end and southern part of the city. Persons examined numbered 30,652—16,463 male and 14,189 female.

On the average, out of every 1,000 persons of whom miniature films were taken, 66 were recalled for a full-size film of the chest and 37 for clinical examination; the variation in these figures from last year is explained by a change of policy with regard to cardiac cases which are now given a medical examination in preference to full-size X-ray examination. Of the same number 6 persons required hospital treatment for active disease (a decrease from 1944) and 8 observation at a dispensary or under the care of their own doctor; 11 other persons with inactive disease required no further action. The figure of 44 non-tuberculous cases in the same group represents an increase which is due to the more exact determination of cardiac cases.

Of the cases of active pulmonary tuberculosis, 167 were resident in Glasgow; 101 were admitted to hospital, 64 were referred to a tuberculosis dispensary and 2 to their own doctor.

The following table summarises the results for the year:—

	Males.	Females.	Total.
Total Examinations ... ..	16,463	14,189	30,652
Number in whom Large Film taken ... ..	1,009	1,012	2,021
Percentage of Whole ... ..	6.13	7.13	6.59
Number in whom Clinical Examination made ... ..	496	631	1,127
Percentage of Whole ... ..	3.01	4.45	3.68

### PULMONARY TUBERCULOSIS.

#### A. Tuberculous Cases in which Action taken—

##### *Total*

Number of Cases ... ..	195	241	436
Percentage of Whole ... ..	1.18	1.70	1.42

##### *Active Pulmonary Tuberculosis.*

Number of Cases ... ..	74	106	180
Percentage of Whole ... ..	0.45	0.75	0.59

##### *Inactive Pulmonary Tuberculosis.*

Number of Cases ... ..	121	135	256
Percentage of Whole ... ..	0.73	0.95	0.84

<i>B. Tuberculous Cases in which No Action taken—</i>							
<i>Total—All Inactive Pulmonary Tuberculosis.</i>					Males.	Females.	Total.
Number of Cases	...	...	...	...	184	148	332
Percentage of Whole	...	...	...	...	1·12	1·04	1·08
<i>C. Previously known Pulmonary Tuberculosis.</i>							
Number of Cases	...	...	...	...	20	13	33
Percentage of Whole	...	...	...	...	0·12	0·09	0·11
NON-TUBERCULOUS CASES.							
Number of Cases	...	...	...	...	684	659	1,343
Percentage of Whole	...	...	...	...	4·15	4·64	4·38

### X-RAY WORK.

The following table shows the amount of work done at the various institutions :—

Institution	Number of Patients Skiagraphed.		Number Skiagraphs taken.	Number of Screen Ex- aminations only.	Total Patients.
	Indoor	Outdoor			
Ruchill ...	4,614	11,097	18,942	5,275	20,986
Robroyston ...	2,236	184	3,235	2,984	2,420
Mearnskirk ...	5,149	687	11,151	1,131	5,836
Baird Street ...	—	—	—	8,802	642
Bellefield ...	590	—	—	943	148
Florence Street	—	7,738	9,246	—	7,738

### VENEREAL DISEASE.

Although the incidence of venereal disease in both males and females showed a continued downward trend, apparent since 1942 and 1943, it was obvious from the monthly statistics that towards the latter half of the year there was taking place an upward swing. This change has been carried forward into 1946 and is illustrated by the following table constructed for the yearly periods ending 30th June, 1946. The increased incidence in acute gonorrhoea in males is marked although acute syphilis in males and females is also affected.

#### NEW CASES OF VENEREAL DISEASE FOR THE 12 MONTHS ENDING 30TH JUNE, 1946.

Year Ending 30th June.	Acute Syphilis.		Acute Gonorrhoea.	
	Males.	Females.	Males.	Females.
1940	294	98	1,268	126
1941	506	165	1,675	170
1942	724	310	1,672	295
1943	755	389	1,491	353
1944	524	272	1,202	418
1945	374	210	1,214	377
1946	471	265	1,847	411

The continuation of this fairly sharp rise into 1946 is illustrated by the next summary showing the total new cases attending the centres for the war years and for the first six months of 1946.

NEW AND "TRANSFERRED IN" CASES OF VENEREAL DISEASE  
ATTENDING THE CENTRES FOR THE FIRST TIME.

				Total New Cases.	Transferred In
1939	...	...	...	4,724	189
1940	...	...	...	5,021	219
1941	...	...	...	5,891	441
1942	...	...	...	6,344	642
1943	...	...	...	7,740	853
1944	...	...	...	6,544	735
1945	...	...	...	6,582	619
1946 (6 months)	...	...	...	4,743	856

Such a rise in the immediate post-war period is to be expected but it is doubtful if any clear cut explanation can be given. The following factors are known to be involved :—

- (1) The immediate post-war period is one of readjustment and a rise in venereal disease is to be expected during this period. A similar rise occurred in 1918 ;
- (2) The age groups of men demobilised from the Services are the same as those in which venereal disease is prevalent and therefore there are a greater number likely to be exposed to venereal disease ; and
- (3) A limited number of Service men have developed venereal disease after demobilisation, having been infected while abroad.

From all the information available it would appear that the proportion of new cases of venereal disease being infected within the city to the total new cases coming to the centres remains more or less the same as in previous years. There is no evidence that Service or ex-Service men are alone or even mainly responsible for the rise.

A new group of patients have attended the centres during 1945-46. Ex-Service men and women who have had venereal disease while in the Services and have consented to their names being referred to the Medical Officer of Health in their home town. In Glasgow 565 forms were received during the nine months ended 31st August, 1946, and all were sent an invitation to come to the Public Health Department and discuss " their medical history while serving in the Forces." As a result 86 per cent. attended either a civil centre or a military hospital in the neighbourhood, in most cases for serological tests. Two facts were noticeable in this group, the anxiety of the patients to complete



their tests of cure and the completeness of treatment of the Service case. Of course Penicillin had been widely used for both syphilis and gonorrhoea and in the case of early sero-positive syphilis it is clear that Penicillin alone was inadequate and in men being demobilised during the latter part of the period under survey, arsenic and bismuth were being given in addition to Penicillin.

To meet the added pressure on the Venereal Diseases Service, additional sessions have been opened at the main centres and junior medical officers were engaged to staff sessions operating with one clinician. The opportunity is taken in this report to print sketch plans of the two new centres constructed during the war years. The one at Broomielaw replaces, and is constructed on the site adjoining the old Broomielaw clinic, a centre which was frequented by seafaring men and known all the world over. Interesting features incorporated in the design are an automatic heating system using an electric boiler and fluorescent lighting. Two lock-up garages have been provided for the medical staff as the area is not one where motor cars can be left unattended. The Gorbals Annexe Clinic for women was an adaptation of a disused public-house. By making a new door in the side street it was possible to give an entrance which was not overlooked. The clinic being an adaptation it is not completely satisfactory but the staff have remarked on the ease with which the centre can be operated.

Penicillin has come into general use in the treatment of acute gonorrhoea, an aqueous solution being employed, requiring four to five injections in the course of one day. The patient gives up the day to the injections but few object to the sacrifice. Penicillin in oil wax is becoming available and will permit of gonorrhoea being treated by two injections and of syphilis being treated outdoor. It has been decided to give, in addition, in syphilis one course of arsenic and bismuth injections in sero-positive cases and several courses in the case of patients suffering from secondary and later stages of the disease.

Continued stress is being placed on the follow-up of defaulters, and the visits by nurse almoners and the follow-up letters have both increased over the numbers for the year 1944. As a result 76.5 per cent. of the female patients resumed treatment and 78.0 per cent. of the male patients after visits by the nurse almoners and the receipt of follow-up letters, respectively.

The number of male cases coming to the clinics in 1945 suffering from acute gonorrhoea has increased to 1,301, while female gonorrhoea patients remain approximately constant at 398. The respective figures for 1944 were 1,231 in males and 407 in females.

Special attention has been paid to the tracing of sources of infection referred from both male and female centres. The following table shows the work carried out by the staff at the male and female *ad hoc* centres :

VENEREAL DISEASES, 1945—AD HOC CLINICS.

*Contact Tracing, and Follow-up of Sources of Infection.*

	Wives.		Consorts.	
	Number.	Percentage.	Number.	Percentage.
Attended ... ..	155	93.9	51	45.5
Did not attend ... ..	10	6.1	61	54.5
	<hr/>		<hr/>	
	165		112	

Total Referred, 277 ; Total attended, 206—74.4 per cent.

*Referred by Female Clinics.*

					Husbands and Consorts.	
					Number.	Percentage.
Attended ... ..	...	...	...	...	24	64.9
Did not attend ... ..	...	...	...	...	13	35.1
					<hr/>	
Total Referred ... ..	...	...	...	...	37	

Under Defence Regulation 33B any person who has been named by two patients as the source of their infection can be compelled to submit to examination, and if found infectious to treatment. Action is taken in Glasgow on the receipt of one notification, and this has been the means of bringing a number of contacts under treatment. The following table illustrates the working of the Regulation in Glasgow during the year :—

DEFENCE REGULATION 33B—FOR THE YEAR 1945.

	Male.	Female.
Form I. Received ... ..	4	252
Visits Made ... ..	5	221
Suspects Found ... ..	2	67
Suspects did not attend ... ..	1	13
Suspects not found ... ..	1	42
Suspects gone away ... ..	—	22
Suspects came to Clinic ... ..	1	51
Suspects attending when notified ... ..	—	11
Insufficient Data ... ..	—	89
Suspects to attend own Doctor ... ..	—	1
Suspects notified twice ... ..	1	19
Suspects notified thrice ... ..	—	4
Total ... ..	4	252

The publicity campaign has been intensified during the year and its effect on the attendance of patients suffering from non-venereal conditions but who may have had reason to believe that they were suffering from venereal disease is shown in the following table :—

ATTENDANCE OF PATIENTS SUFFERING FROM NON-VENEREAL CONDITIONS DURING YEARS 1941, 1942, 1943, 1944, and 1945.

Year.	Males.	Females.	Total.
1941	880	246	1,126
1942	1,058	398	1,456
1943	2,002	708	2,710
1944	1,656	721	2,377
1945	1,674	799	2,473

*Syphilis*.—The number of male patients suffering from acute syphilis coming to the clinics for the first time in 1945 was 365, which compares with 454 for the year 1944 and 671 for the year 1943. The incidence of acute syphilis in females decreased from 262 in 1944 to 252 in 1945, which compares with 368 in 1943. Patients suffering from late syphilis increased from 329 in 1944 to 411 in 1945.

Congenital syphilis at all ages has decreased slightly but there is again a rise in the cases under one year of age and also in the rate per thousand live births. The following table shows the position during the past 20 years :—

CONGENITAL SYPHILIS.

Year.	All Cases.	Cases—1 Year.	Rate per 1,000 Live Births.
1922	1,023	335	12.8
1927	551	119	5.0
1932	240	72	3.2
1937	177	36	1.6
1941	67	15	0.75
1942	71	27	1.3
1943	97	32	1.4
1944	83	29	1.3
1945	72	32	1.6

The fall in the incidence of acute syphilis in females is reflected in the results of the blood test, which can be seen from the following table :—

PRE-NATAL BLOOD TESTS.

Year.	Number.	Percentage Positive.
1925	—	4.9
1930	1,749	2.8
1935	3,334	1.8
1940	8,714	1.3
1942	10,265	1.18
1943	11,067	1.7
1944	10,260	1.3
1945	10,853	1.18

All specimens are submitted to the Kahn Test and if positive the Wassermann Test is also applied to the same specimen and a repeat specimen requested.

The essential feature of the treatment of expectant mothers who may suffer from syphilis is that patients are treated where they are found. There are special sessions at ante-natal centres, and should the patient have come under treatment too late to have a healthy child, mother and child are both treated at the same maternity and child welfare centre.

*Gonorrhoea.*—As already mentioned the incidence of acute gonorrhoea has risen slightly during the year compared to 1944 (1,637 to 1,699). There has been a very marked rise during the first six months of 1946, a trend which was apparent towards the end of 1945. The decrease in incidence of chronic gonorrhoea in males and females has continued and the exact figures for this stage of the disease in females are shown in the following table :—

#### CHRONIC GONORRHOEA IN FEMALES.

Year.	Number.		
1938	...	...	312
1939	...	...	266
1940	...	...	229
1941	...	...	119
1942	...	...	88
1943	...	...	93
1944	...	...	54
1945	...	...	42

*Veneral Disease in Seamen.*—Seamen continue to form a considerable proportion of the patients attending the male centres, as can be seen from the following table :—

#### BLACK STREET, BROOMIELAW, BELLAHOUSTON CLINICS.

##### NEW AND TRANSFERRED-IN PATIENTS.

##### PROPORTION OF SEAMEN TO TOTAL CASES.

		Early Syphilis.			Acute Gonorrhoea.		
		All.	Seamen.		All.	Seamen.	
1939	..	265	54	20.4%	1,133	75	6.6%
1940	...	403	133	33.0%	1,210	224	18.5%
1941	...	793	434	54.7%	1,671	539	32.3%
1942	...	1,082	589	54.4%	1,543	532	34.5%
1943	...	1,149	577	50.2%	1,393	436	31.3%
1944	...	831	452	54.3%	1,356	428	31.6%
1945	...	679	228	33.6%	1,478	370	25.0%

The proportion of seamen to all new and "transferred-in" cases coming to the three main male clinics is decreasing and will probably approach the pre-war percentage within the next two years, a change consequent on the marked decrease in shipping coming to Glasgow.

*In-Patient Treatment.*—During the year 1945, 486 patients were treated in hospital, compared to 489 in 1944. The number of male patients admitted to Belvidere Hospital was 202 in 1945, a decrease of 17 compared with the previous year. Patients admitted to Baird Street Auxiliary Hospital and Ruchill Hospital increased from 244 in 1944 to 265 in 1945. The following table shows admissions of patients to hospitals of the Local Authority and elsewhere for the treatment of venereal disease :—

TOTAL NUMBER OF PATIENTS ADMITTED FOR IN-PATIENT TREATMENT.

	Sex.	Primary Syphilis D.G. + W.R. —	Primary Syphilis W.R. +	Secondary Syphilis.	Latent Syphilis. (1st year).	All Later Stages.	Congenital Syphilis.	Extra-genital Infection.	Acute Gonorrhoea.	Chronic Gonorrhoea.	Soft Chancre.	Non-Specific Venereal Disease.	Non-Venereal.	Total Admissions.	Aggregate Days' Residence.	Average Days' Residence.
Belvidere Hospital	M.	10	24	18	1	31	—	—	64	4	16	30	4	202	5,229	25.9
Baird Street	M.	—	—	—	—	—	5	—	—	—	—	—	2	7	894	127.8
	F.	1	3	6	1	1	2	—	19	2	—	5	8	48	3,817	79.5
Ruchill Hospital	M.	—	—	—	—	—	6	—	—	—	—	—	8	12	2,076	173.0
	F.	5	19	45	—	13	1	—	78	12	—	1	17	191	12,653	66.2
Other Hospitals	M.	—	—	—	—	3	8	—	—	—	—	—	—	11	389	35.4
	F.	—	—	—	—	3	9	—	—	—	—	—	1	13	413	31.8
Totals		16	46	69	2	51	31	—	161	18	16	36	40	486	25,471	52.4

*Attendance of Patients.*—Patients attending for the first time the various treatment centres numbered 6,582 compared with 6,544 in 1944. There were 116,953 attendances of new and old cases and 486 patients were admitted for in-patient treatment, 120 being admitted directly without previous attendance at a centre. Corporation *ad hoc* centres dealt with 92.5 per cent. of all acute venereal disease.

The following table summarises the attendances of new patients at the various centres :—

	Ad Hoc Treatment Centres		Glasgow: All Centres.
	Males.	Females.	
Acute Syphilis (includes Primary, Secondary, and Latent in the First Year of Infection)	334	178	617
Acute Gonorrhoea ... ..	1,286	345	1,699
Total Acute Venereal Disease ... ..	1,620	523	2,316
Late and Congenital Syphilis... ..	105	89	411
Chronic Gonorrhoea ... ..	32	40	74
Total Chronic Venereal Disease... ..	137	129	485
Other Diseases, including Soft Sore, Septic Balinitis, etc. ... ..	954	59	1,308
Non-Venereal ... ..	1,581	619	2,473

*Incidence of Jaundice.*—Following on the publication of the Medical Research Council War Memorandum No. 15—"The Sterilisation, Use and Care of Syringes," 1945, added care was taken in the sterilisation of the syringes and needles and the practice was continued of allocating during each day an individual syringe to each patient. As an undoubted result there was a marked fall in the incidence of jaundice of all degrees among new cases of early and late syphilis under treatment at the male *ad hoc* treatment centres. Of 334 cases of early syphilis, 5.4 per cent. developed jaundice compared to 22.5 per cent. in 1944, while 3.3 per cent. out of 92 cases of late syphilis developed this complication. Only one of the early syphilitic jaundice patients required treatment in hospital and none of the cases of jaundice in late syphilis.

*Issue of Salvarsan Substitutes to Medical Practitioners.*—During the year 17 medical practitioners received free supplies of salvarsan substitutes for the treatment of private patients. The total number of doses issued was 553, which compares with 726 in 1944.

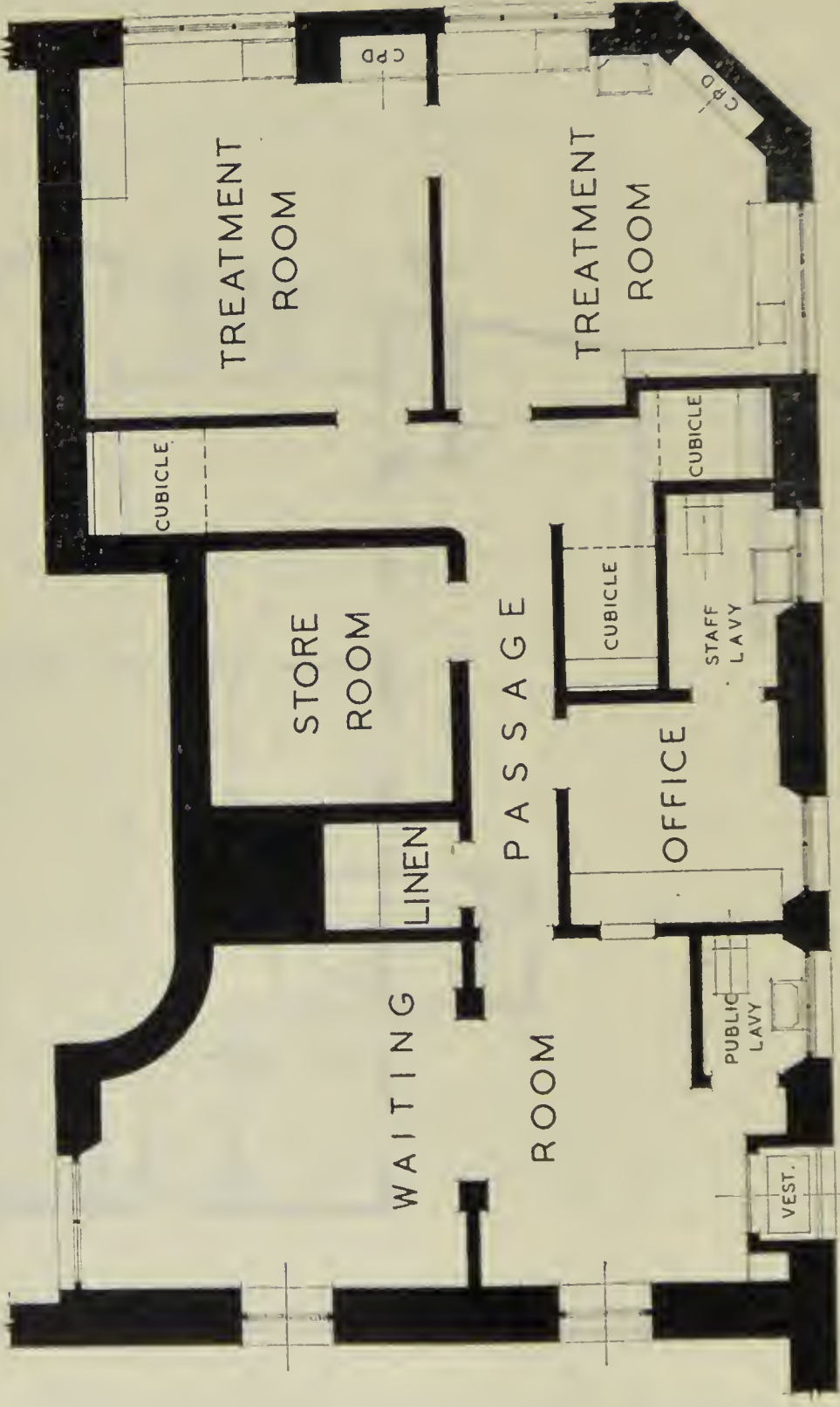
*Follow-up of Defaulters.*—As has already been mentioned, the follow-up of defaulters by personal visits of the nurse almoners, and in the case of males by follow-up letters and visits by the senior attendants of the male centres, has resulted in a high proportion of the patients resuming treatment. During the year the nurse almoners visited 1,473 female patients on 2,262 occasions and persuaded 76.5 per cent. of the patients to resume treatment. Wrong name and address had been given on 74 occasions.

With regard to the males, 2,178 follow-up letters were sent to 1,392 patients who defaulted during treatment, and 78.0 per cent. of the patients resumed treatment. This compares with 2,135 follow-up letters sent to 1,423 patients during 1944, with 80.3 per cent. of the patients during that year resuming treatment. Wrong name and/or address were given by 14.7 per cent. of the defaulting patients.



BROOMIELAW V.D. CLINIC.

GORBALS ANNEXE—CLINIC FOR WOMEN.



ENTRANCE



## SECTION V.

## PORT HEALTH AUTHORITY.

The order extending the jurisdiction of the Glasgow Port Health Authority was withdrawn on 31st December, 1945, and the jurisdiction returned to the normal peace-time limits. The staff at Greenock was reduced to one Medical Officer and four Boarding Inspectors. All the launches were dispensed with and so also was the additional accommodation, the Corporation deciding to retain the original office. The following tables give the details of the vessels arriving in the Port during the year :—

## NATIONALITY OF VESSELS ARRIVING DURING 1945 :—

Nationality	...	...	Ships.	Crews.	Passengers.
British	...	...	723	80,588	318,444
Danish	...	...	11	365	4
Dutch	...	...	50	8,276	35,688
French	...	...	4	780	3,966
Greek	...	...	10	357	—
Norwegian	...	...	93	4,752	5,514
Panamanian	...	...	6	265	3
Polish	...	...	6	1,160	6,277
Swedish	...	...	29	806	16
U.S.A.	...	...	249	17,252	12,722
Yugo-Slav	...	...	2	71	—
Total	...	...	<u>1,183</u>	<u>114,672</u>	<u>382,634</u>

## TONNAGE OF VESSELS ARRIVING DURING 1945 :—

Month.	...	...	Number of Ships.	Tonnage.
January	...	...	120	697,348
February	...	...	97	568,863
March	...	...	141	788,734
April	...	...	124	594,044
May	...	...	160	778,814
June	...	...	124	676,951
July	...	...	76	475,939
August	...	...	79	300,827
September	...	...	72	262,559
October	...	...	62	238,649
November	...	...	61	209,016
December	...	...	67	142,214
Total	...	...	<u>1,183</u>	<u>5,733,958</u>

In addition, 219 ships, of 893,937 tons, arrived from various ports in the U.K. for orders.

NUMBER OF SHIPS FROM FOREIGN PORTS AND IRISH FREE STATE DURING THE YEAR 1945 :—

Month.	FROM INFECTED PORTS.						FROM NON-INFECTED PORTS.						TOTAL.		From Irish Free State	
	Class 'A'—Direct.			Class 'B'—Coastwise.			Total 'A' and 'B'			Direct or Coastwise.			From Foreign Ports.			
	Ships	Crews	Passengers	Ships	Crews	Passengers	Ships	Crews	Passengers	Ships	Crews	Passengers	Ships	Crews		Passengers
Jan. ...	20	4,413	29,247	7	542	...	27	4,955	29,247	93	10,836	61,821	120	15,791	91,068	1
Feb. ...	30	4,510	13,677	7	438	...	37	4,948	13,677	60	7,542	41,661	97	12,490	55,338	—
Mar. ...	18	4,105	28,250	5	398	...	23	4,503	28,250	118	12,392	59,768	141	16,895	88,018	7
Apr. ...	19	3,135	19,936	8	775	...	27	3,910	19,936	97	8,380	20,689	124	12,290	40,625	6
May ...	28	5,077	27,992	1	82	...	29	5,159	27,992	131	10,681	8,962	160	15,840	36,954	5
June ...	46	8,620	31,621	5	302	...	51	8,922	31,621	73	4,988	2,100	124	13,910	33,721	8
July ...	22	4,679	5,919	6	481	...	28	5,160	5,919	48	2,794	3,260	76	7,954	9,179	7
Aug. ...	10	832	3,711	7	323	...	17	1,155	3,711	62	3,410	747	79	4,565	4,458	9
Sept. ...	13	677	52	7	566	...	20	1,243	52	2,731	3,271	300	72	3,974	3,323	21
Oct. ...	10	927	5,883	5	879	...	15	1,806	5,883	47	2,134	300	62	3,940	6,183	12
Nov. ...	18	1,408	3,691	9	468	...	27	1,876	3,691	34	1,348	18	61	3,224	3,709	20
Dec. ...	15	1,454	6,999	6	430	...	21	1,884	6,999	46	1,915	3,059	67	3,799	10,058	7
TOTAL ...	249	39,837	176,978	73	5,684	...	322	45,521	176,978	861	69,151	205,656	1,183	114,672	382,634	103

## NATIONALITY OF SHIPS' CREWS ARRIVING DURING 1945 :—

Month.	British.	Natives of India.	Chinese.	Other Nation- alities.	Total.	Passen- gers.
January ...	11,334	805	121	3,531	15,791	91,068
February ...	8,392	718	36	3,344	12,490	55,338
March ...	10,702	761	160	5,272	16,895	88,018
April ...	7,380	829	135	3,946	12,290	40,625
May ...	9,065	667	40	6,068	15,840	36,954
June ...	9,763	450	167	3,530	13,910	33,721
July ...	6,273	191	—	1,490	7,954	9,179
August ...	2,982	280	297	1,006	4,565	4,458
September ...	2,595	411	42	926	3,974	3,323
October ...	2,566	159	148	1,067	3,940	6,183
November ...	1,807	371	90	956	3,224	3,709
December ...	1,818	456	39	1,486	3,799	10,058
Total ...	74,677	6,098	1,275	32,622	114,672	382,634

During the year the medical services carried out at Greenock in connection with shipping declined, and this is shown by the number of cases found on arrival, the number of cases treated under the Non-Infectious Illness and Accident Scheme and the number of cases removed by the Ambulance Launches. These are shown in tabular form.

## CASES FOUND ON ARRIVAL.

Disease.	Removed to Hospital.	Sent Home.	Referred to Clinic.	Left on Board.	Died.	Total.
Smallpox ...	3	—	—	—	—	3
Scarlet Fever ...	29	—	—	—	—	29
Diphtheria ...	30	—	—	—	—	30
Enteric Fever ...	7	—	—	—	—	7
Measles ...	48	—	—	—	—	48
Erysipelas ...	4	—	—	—	—	4
C.S.F. ...	6	—	—	—	—	6
Dysentery ...	21	—	—	—	—	21
Malaria ...	21	1	—	1	—	23
Relapsing Fever	1	—	—	—	—	1
Glandular Fever	3	—	—	1	—	4
German Measles	51	—	—	—	—	51
Pneumonia ...	56	2	—	—	—	58
Mumps ...	146	—	—	—	—	146
Tuberculosis (Pulmonary)	15	9	—	1	—	25
Tuberculosis (Other Lesions)	1	—	—	—	—	1
Whooping Cough	5	2	—	—	—	7
Chickenpox ...	68	2	—	—	—	70
Meningitis ...	5	—	—	—	—	5
Rheumatic Fever	3	—	—	1	—	4
Influenza ...	3	—	—	1	—	4
Scabies ...	16	5	—	—	—	21
Venereal Disease	45	2	23	8	—	78
Scrub Typhus ...	1	—	—	—	—	1
Continued Fever	2	—	—	—	—	2
Infective Jaundice	1	—	—	—	—	1
Leprosy ...	1	—	—	—	—	1
Accidents ...	62	2	5	4	—	73
Other Illnesses ...	679	26	13	11	—	729
Total ...	1,333	51	41	28	—	1,453

## MEDICAL ATTENTION AT THE CLYDE ANCHORAGES.

Disease.	Removed to Hospital.	Sent Home.	Referred to Clinic.	Left on Board.	Died.	Total.
Scarlet Fever ...	2	—	—	—	—	2
Diphtheria ...	5	—	—	—	—	5
Enteric Fever ...	3	—	—	—	—	3
Measles ...	3	—	—	—	—	3
Dysentery ...	2	—	—	—	—	2
Malaria ...	2	—	—	—	—	2
Meningitis ...	2	—	—	—	—	2
Pneumonia ...	8	—	—	—	—	8
Tuberculosis (Pulmonary)	—	1	4	—	—	5
Chickenpox ...	4	—	—	—	—	4
Mumps ...	2	—	—	—	—	2
German Measles	1	—	—	—	—	1
Rheumatic Fever	1	—	—	—	—	1
Influenza ...	4	2	—	9	—	15
Scabies ...	2	3	1	8	—	14
Venereal Disease	3	—	25	8	—	36
Accidents ...	19	6	23	33	—	81
Other illnesses ...	74	24	46	127	2	273
Total	137	36	99	185	2	459

## CASES REMOVED BY AMBULANCE LAUNCHES.

Disease.	Removed to Hospital.	Sent Home.	Referred to Clinic.	Returned to ship.	Dead.	Total.
Smallpox ...	3	—	—	—	—	3
Scarlet Fever ...	23	—	—	—	—	23
Diphtheria ...	9	—	—	—	—	9
Enteric Fever ...	3	—	—	—	—	3
Measles ...	33	—	—	—	—	33
Erysipelas ...	2	—	—	—	—	2
C.S.F. ...	5	—	—	—	—	5
Dysentery ...	3	—	—	—	—	3
Malaria ...	14	1	—	—	—	15
Relapsing Fever	1	—	—	—	—	1
Glandular Fever	3	—	—	—	—	3
German Measles	45	—	—	—	—	45
Pneumonia ...	48	1	—	—	—	49
Mumps ...	103	—	—	—	—	103
Tuberculosis (Pulmonary)	8	—	2	—	—	10
Chickenpox ...	40	—	—	—	—	40
Meningitis ...	4	—	—	—	—	4
Rheumatic Fever	3	—	—	—	—	3
Influenza ...	7	1	—	—	—	8
Serub Typhus ...	1	—	—	—	—	1
Scabies ...	12	—	—	—	—	12
Venereal Disease	43	—	20	3	—	66
Accidents ...	61	1	13	4	—	79
Other illnesses	649	10	33	8	1	701
Total ...	1,123	14	68	15	1	1,221

*Smallpox.*—Five ships arrived at the port during the year having smallpox, or having had smallpox, on board. The circumstances were as follows :—

Ship A arrived on 20th February, having landed a soldier suffering from smallpox on 25th January, i.e., 26 days previously. The patient had sickened on 19th January and was isolated on board. Vaccination of all on board had commenced on 21st January and was completed by 26th. The ship called at three "suitably equipped" ports after landing the case. When the ship arrived at the Port of Glasgow, medical inspection was carried out of all on board, followed by surveillance as prescribed by the Port Sanitary Regulations.

Ship B arrived on 12th March, having landed three soldiers suffering from smallpox on 20th February, i.e., 20 days previously. The rash in all three cases had appeared on 17th February, when they were isolated on board. Vaccination of all on board had been carried out on 21st February with subsequent scrutiny of the results. The ship called at one "suitably equipped" port before arriving at Glasgow. In the case of this ship, the precautions applicable to Ship A were carried out on arrival at the Port of Glasgow.

Ship C arrived on 12th March, having landed a soldier suffering from smallpox on 25th February, i.e., 15 days previously. This patient sickened on 16th February and had been isolated on board on 19th February. Vaccination of all on board was commenced on 25th February. Revaccination of all personnel not showing a positive result was carried out on 7th March. On arrival of the ship at the Port of Glasgow, a second case (modified smallpox) was found, the date of sickening being 28th February. The usual precautions, medical inspection and surveillance were put into operation.

In the case of this ship there appears to have been some doubt as to the diagnosis of the first case. The ship had sailed before the shore hospital had communicated to it its diagnosis of smallpox; this information, however, was transmitted to Glasgow by the War Office. The case removed at Glasgow was dealt with administratively as smallpox, the diagnosis being difficult to make as between smallpox and chickenpox in the opinion of the Medical Superintendent of the smallpox hospital. Crusts from the patient were submitted for the Complement Fixation Test to Professor Downie of Liverpool, who kindly undertook the examination and who reported that they came from a case of smallpox.

Ship D arrived on 27th March. A member of the R.A.F., a Jamaican, had sickened on 5th March, embarked on 6th March, and on the following day developed a rash. He was diagnosed as smallpox and isolated in the ship's hospital from 7th March. On arrival he was

removed to hospital. Everyone on board was vaccinated and arrangements made for subsequent surveillance. The diagnosis of this case presented difficulty, but the laboratory test was subsequently reported negative for smallpox.

Ship E arrived on 30th March, having on board a Distressed British Seaman suffering from confluent smallpox. The patient took ill on 26th March, and was placed in strict isolation the following day. His rash appeared on 29th March, and on arrival he was removed to the smallpox hospital along with four contacts whom it was thought desirable to place under observation.

All on board were examined and vaccinated, and thereafter placed under surveillance. Of the Distressed British Seamen on board, seven had not been vaccinated since infancy, while three, including the patient, had never been vaccinated.

*Typhus.*—There were no cases of louse-borne typhus, but one member of the services arrived from the Far East suffering from scrub typhus. He was removed to Knightswood Hospital, where he recovered.

*Aliens.*—During the year 1945, 274 ships arrived with 4,712 alien passengers on board.

Austrian ... ..	1	Iranian ... ..	4
Belgian ... ..	52	Latvian ... ..	1
Central & South American	88	Norwegian ... ..	895
Chilean ... ..	5	Palestinian ... ..	13
Chinese ... ..	705	Polish ... ..	394
Cuban ... ..	3	Portuguese ... ..	458
Czech ... ..	23	Roumanian ... ..	4
Danish ... ..	55	Russian ... ..	78
Dutch ... ..	416	Spanish ... ..	7
Egyptian ... ..	62	Swedish ... ..	21
Estonian ... ..	5	Swiss ... ..	10
Finland & Baltic ... ..	8	Turkish ... ..	7
French ... ..	67	U.S. Citizens ... ..	868
Greek ... ..	357	Yugo-Slav ... ..	1
Hungarian ... ..	1	Other Europeans ... ..	29
Italian ... ..	7	Other Non-Europeans ... ..	43
Stateless ... ..	24		
		Total ... ..	<u>4,712</u>

*Examination of water supply.*—Following complaints about the water supply by members of the crew on board two vessels in the harbour; the conversion of one oil carrying vessel into a water carrier; and during investigation into outbreaks of intestinal sickness (dysentery, diarrhoea, suspected typhoid fever, etc.) among passengers and crew in six instances, twenty-six samples of water were examined: seventeen by the City Analyst, who reported four unsuitable, and nine by the City Bacteriologist, who reported one unfit for human consumption. The water storage tanks, in cases where the water was found to be unfit, were emptied and cleansed before refilling with fresh water.

*Parrots (Prohibition of Import) Regulations (Scotland), 1930.*—Five notices prohibiting the landing of five budgerigars and two parrots found on board five vessels arriving in the port from abroad were served on the owners. In each instance a written undertaking was given to re-export the birds.

*Hygiene in Crew spaces.*—Nine hundred and sixty-nine visits (895 to foreign going vessels and 74 to coasting vessels) were paid during the year, also 415 reinspections and revisits (299 on account of nuisances, 116 on account of infectious disease, etc.). During these visits, 1,213 nuisances were discovered and dealt with, 104 by written intimations under Section 19 of the Public Health (Scotland) Act, 1897, and 172 by verbal warning.

The table on the following page shows the type of nuisance, and from the figures given it is regrettable to note that, as was the case last year, verminous conditions still account for the greatest number of nuisances discovered. From reports picked at random, of the inspection of some 480 vessels, it was found that 230 were infested with vermin (bugs, cockroaches, ants and food insect pests) in varying degrees.

The most common offender was the cockroach and the compartments found most frequently to be infested were in the following order—pantries, galleys, crew's quarters, provision storerooms, officers' accommodation, passengers' accommodation and holds.

The most serious of the infestations, from a hygienic point of view are those affecting the galleys, pantries and provision store-rooms, being compartments where food for human consumption is either cooked, served or consumed.

The methods employed for the treatment of vermin infested compartments are insect powders, liquid contact sprays and fumigation by hydrocyanic acid gas. Every opportunity is taken to have any infested compartment fumigated while the vessel is undergoing fumigation for a deratisation certificate.

With the discovery during the war of the value of D.D.T. as an insecticide and the new substance "Gammexane," it is to be hoped that in the future, through the intelligent use of these two substances, the control of insect infestations on board ship will be simplified.

*Forecastles (Functional Neglect)—*

Paintwork, etc., Dirty ... ..	50
Floors and Woodwork Dirty ... ..	93
Tables and Benches Dirty ... ..	102
Alleyways Dirty ... ..	58
Food Lockers Dirty ... ..	78
Verminous Condition ... ..	134
Galleys Dirty ... ..	21
Scuppers Choked ... ..	36
Accumulation of Rubbish ... ..	58
Beds and Bedding Dirty ... ..	13
	<hr/>
	643
	<hr/>

*Water-Closets and Wash Places (Functional Neglect)—*

Troughs of W.C. Basins Foul or Choked ... ..	87
Floors or Woodwork Dirty ... ..	28
Paintwork Dirty ... ..	25
Scuppers Choked ... ..	42
Flushing Apparatus Defective ... ..	25
Wash Basins Dirty ... ..	37
	<hr/>
	244
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*General—*

Drinking Water Tanks to Cleanse ... ..	8
Accumulation of Garbage on Deck ... ..	51
Gear Stored in Sleeping Accommodation ... ..	10
Bilges require Cleansing ... ..	—
	<hr/>
	69
	<hr/>

*Forecastles (Structural Defects)—*

Ports or Decklights Leaking ... ..	13
Deck-heads Leaking ... ..	45
Heating Apparatus Defective ... ..	39
Hawse Pipes Defective ... ..	—
Floors Broken ... ..	5
Condensation ... ..	2
Lighting Defective ... ..	1
Ventilation Defective ... ..	16
Food Locker Doors Broken ... ..	9
Bulkheads Defective ... ..	1
Steam Pipes Leaking ... ..	30
	<hr/>
	161
	<hr/>

*Water-Closets and Wash-Places (Structural Defects)—*

W.C. Seats Missing or Broken ... ..	40
Doors Broken or Defective ... ..	8
W.C. Basins Broken ... ..	12
Lighting Defective ... ..	1
Ventilation Defective ... ..	14
Wash Basins Broken ... ..	2
Soil Pipe or Storm Valve Defective ... ..	14
Floors Broken ... ..	5
	<hr/>
	96
	<hr/>

1,213



*Destruction of rats and mice.*—There was a reduction in the total number of rats destroyed during the year. This reduction, which amounted to 2,214, may be accounted for in part as due to the re-arrangement of shipping, and not to progressive reduction in the number of rats on board ships in general, nor to the number of ships which could be considered rat free.

In the Annual Report for 1943, I referred to the increase in the number of ships infested with rats and the number of rats found dead after fumigation of these ships, and it is interesting to note in the Public Health Reports for November, 1945, issued by the United States Public Health Service that officials at the Port of New York have reported similar conditions on board ships arriving at New York from foreign ports, some of which were in plague infected areas.

The following tables show the sex and species of the rats caught by trapping in sheds, stores and other premises, and destroyed during deratisation on board vessels.

## SHEDS, STORES, AND OTHER PREMISES.

	Brown Rat.		Black Rat.		Total.
	Male.	Female.	Male.	Female.	
HCN ... ..	—	—	—	—	—
SO <sub>2</sub> ... ..	—	—	—	—	—
Trapping ...	80	58	375	248	761
	<u>80</u>	<u>58</u>	<u>375</u>	<u>248</u>	<u>761</u>

## ON BOARD VESSELS.

	Infected Ports.				Non-Infected Ports.				Total.
	Brown Rat.		Black Rat.		Brown Rat.		Black Rat.		
	M.	F.	M.	F.	M.	F.	M.	F.	
HCN ... ..	—	—	2,165	1,174	15	10	1,696	940	6,000
SO <sub>2</sub> ... ..	—	—	—	—	—	—	—	—	—
Trapping ...	—	—	16	6	—	—	—	—	22
	—	—	2,181	1,180	15	10	1,696	940	6,022
Total ... ..	...	...	...	...	<u>6,783</u>				

In addition to the 6,783 shown above, 589 rats were trapped on vessels not requiring deratisation, making a total of 7,372 for the year. Of this number, 641 were submitted for bacteriological examination with negative results. Also 382 mice were destroyed on board ship.

*Fumigation of ships.*—One hundred and seventy-six vessels were fumigated by HCN resulting in the destruction of 6,000 rats. An unusual result of the fumigation of one ship was the discovery that all the rats found dead were not black rats commonly known as ship's rats but "brown" or "shore" rats. (*Rattus Norvegicus*). So far as can be ascertained, this is the first occasion on which a fumigation has yielded a result such as the above. On a few occasions, one "shore" rat has been discovered among the others, but they were considered to be "strays" The vessel in question was a coaster trading between Glasgow and the Western Highlands.

*Rags, Hair, Hides and Bones.*—The following table shows the importation of rags, hair, hides and bones, with source of origin and number of shipments :—

Source of Origin.	No. of Ships.	Rags Bundles.	No. of Ships.	Hair Various Bundles.	No. of Ships.	Hides Various Bundles.	No. of Ships.	Bones Bags.
Egypt ...	7	31,801	—	—	—	—	—	—
United States	—	—	1	1,019	—	—	—	—
South America	—	—	4	2,017	4	5,791	5	16,753
India ...	—	—	6	1,380	8	1,018	9	22,518
Africa ...	—	—	—	—	3	4,908	2	247
Canada...	—	—	—	—	2	39	—	—

*Anthrax.*—Fifteen specimens of dry-salted goatskins from four consignments; 12 of dried cattle hides from two consignments; 6 of wet-salted cattle hides from one consignment; one of sheepskin from one consignment; 3 of dried hide cuttings from one consignment; and six of cow-tail hair from two consignments, were submitted to the City Bacteriologist who reported the presence of *B. anthracis* in seven specimens of dry-salted goatskins and three of dried cattle hides.

The infected specimens were from six different consignments, the seven goatskins being from three shipments—five from two shipments from India and two from one shipment from Africa, while the dried hides were—one from shipment from South America, and two from one consignment from South Africa.

No cases of anthrax occurred among the persons engaged in the discharge of the infected hides, etc.

*Food Inspection.*—There were submitted to the City Analyst, 211 samples of imported foodstuffs and five samples were submitted to the City Bacteriologist for examination. A summary of the samples examined by the Analyst is to be found at the end of this section. The five samples submitted to the Bacteriologist were dried fruits from California, canned meat from South America, and mineral water from ships' stores.

The total weight condemned amounted to 2,762 cwts., 1 qr.—319 cwts., 2 qrs. of which consisted of ships' stores.

A problem which frequently confronts the food inspector is "wet" damaged foodstuffs. The damage may be due to sea water, river water, bilge water or "sweat," and as the source of the moisture is a guiding factor in determining the suitability or otherwise of the material for human consumption, the assistance of the Bacteriologist and/or the Analyst is necessary. One instance which occurred during the year concerned a parcel of citric acid contained in 20 kilo. hessian bags. During discharge, some 1,500 bags were found to be saturated with moisture, and as citric acid itself is a bacteriostatic and bactericidal agent, unable to support any known pathogenic organism, bacteriological examination was out of the question. A sample was therefore sent to the Analyst, who reported that it would be necessary to process the citric acid before using for edible purposes, and the processing would require to include heat treatment by boiling and satisfactory filtration. The material was released to the Port Movements Officer, Ministry of Food, for processing.

With regard to "wet" damage in general and that arising from "sweat" in holds in particular, the following summary of an article published recently serves to illustrate the interest taken by others concerned in this problem.

"Useful investigations into the causes and extent of sweat damage to cargoes on board ship have been carried out in recent years by the Research Committee on Marine Moisture Damage, sponsored by the Association of Marine Underwriters of British Columbia, and to previous reports from this source has now been added one on the rusting of cans in wooden and fibreboard boxes. It is based on investigations, covering a period of nine years, which were carried out by the Canadian Government Forest Products Laboratory, and the specialists engaged in the work

approached the problem from an unusual angle, concentrating more on the material in which the goods were packed than on the elimination of moisture from the warehouses and holds where goods are normally stowed for long periods.

As a result of various experiments, interesting conclusions were arrived at. It is shown that the fibrous material tended to restrict the free flow of air owing to the density of its composition, whereas wooden cases, provided that the moisture content of the species of wood used was not more than 17 per cent., allowed air to circulate freely and also absorbed a certain amount of water which would otherwise set up a corrosive action on the cans or damage any perishable matter. Wooden cases are, therefore, advisable in preference to fibreboard cartons, but the overall requirement appears to be unchanged, and a reliable dehumidifying apparatus installed in warehouses and on board ship will obviate any necessity for the standardising of packing cases, whether of wood or of any material yet to be discovered, and it is safe to predict that in the not far distant future the fitting of this apparatus in all ships will be considered as essential as the cowl-type ventilator is today. Every year, through faulty ventilation, large sums are paid by underwriters in compensating shippers for loss sustained by deterioration of cargo in transit across the sea, and though in the past recommendations have been made, underwriters have not insisted on artificial ventilation being provided before covering any cargo against damage by "sweat," but that such a move will not long be delayed is evident from expenditure on finding a cheap and efficient method of air-conditioning on board cargo vessels which would normally only be equipped with the natural system of ventilation.

Elimination of moisture-damage to cargoes on board ship can now be achieved by air conditioning systems, and in this country, although the application of anti-sweat installations was not possible during the war period, a system of ventilation and control of cargo space conditions has been fully developed and is available for vessels where the nature of the cargo or conditions of service lead to cargo damage by condensation, or where the necessity for maintaining a low humidity is essential for preserving the condition of a cargo."

*Imported Food Regulations.*—The following table shows the character and quantity of the foodstuffs imported direct during 1945 (but does not include coastwise or transhipped cargoes), a percentage of which was examined by the food inspectors before removal :—

Article.	Weight.		Article.	Weight.	
	Tons.	Cwts.		Tons.	Cwts.
Apples ... ..	5,447	10	Lard ... ..	8,476	6
Acids ... ..	1,172	3	Lemons ... ..	6,957	19
Apricots ... ..	378	16	Licorice ... ..	146	6
Bacon ... ..	7,842	18	Maize ... ..	10,757	11
Butter ... ..	2,113	2	Meats (Canned) ... ..	5,664	15
Beans ... ..	4,901	19	Milk (Canned) ... ..	1,402	2
Cheese ... ..	11,765	3	Milk (Dried) ... ..	2,208	11
Coffee ... ..	217	16	Nuts ... ..	3,685	17
Condiments ... ..	1,066	16	Oats ... ..	12,013	7
Eggs ... ..	1,267	14	Oils (Various) ... ..	3,531	5
Egg Powder ... ..	554	14	Onions ... ..	3,369	14
Fish (Canned, etc.) ... ..	5,291	2	Oranges ... ..	50,396	3
Fruits (Canned) ... ..	460	10	Peas ... ..	2,798	16
Fruits (Dried) ... ..	8,522	11	Peaches (Canned) ... ..	80	3
Fruit Juices ... ..	25	18	Pears (Canned) ... ..	124	7
Fruit Pulp ... ..	330	2	Sugar ... ..	8,517	—
Farinaceous Foods ... ..	4,057	6	Sundries ... ..	1,249	1
Flour (Various)... ..	74,042	15	Tea ... ..	13,516	9
Grape Fruit ... ..	7,210	7	Tomatoes (Canned) ... ..	130	10
Ham ... ..	966	15	Vegetables (Canned, etc.)	493	7
Jams and Jellies ... ..	540	9	Wheat ... ..	205,013	18
Total Weight - 478,708 tons, 17 cwts.					

The following foodstuffs were found unfit and disposed of to the satisfaction of the Port Medical Officer :—

Article.	
Aerated Waters ... ..	1,704 $\frac{1}{2}$ -pint bottles.
Beer ... ..	1,056 $\frac{1}{2}$ -pint bottles.

Article.	Weight.		Article.	Weight.	
	Cwts.	Qrs.		Cwts.	Qrs.
Bacon ... ..	—	2	Fowls (Frozen) ... ..	2	1
Citric Acid ... ..	538	—	Jam ... ..	—	1
Condiments ... ..	7	2	Meats (Frozen) ... ..	171	3
Dhall ... ..	2	2	Meats (Pickled) ... ..	133	2
Fish (Frozen) ... ..	1	1	Milks (Canned) ... ..	233	2
Fish (Canned) ... ..	16	2	Milk (Dried) ... ..	9	—
Fruits (Dried) ... ..	1,244	—	Meats (Canned) ... ..	3	2
Fruits (Canned) ... ..	36	3	Oranges ... ..	318	2
Fruit Pulp ... ..	42	1	Tea ... ..	—	2
			Yeast ... ..	—	1

Total Weight - 2,762 cwts., 1 qr.

(Note.—319 cwts., 2 qrs., were from ships' stores).

SAMPLES OF FOODSTUFFS SUBMITTED TO THE CITY ANALYST :—

Article.	Fit for Human Consumption.	Unfit for Human Consumption or not in conformity with Regulations.	Remarks.
Apples ... ..	4	—	
Apricot Pulp ... ..	2	—	
Butter ... ..	6	—	
Cereals (Rolled Oats)	4	—	
Coffee ... ..	1	—	
Cocoa ... ..	2	—	
Corn Starch ... ..	13	—	
Cheese ... ..	13	—	
Citric Acid ... ..	5	2	Contaminated with dirt and debris—538 cwts. sent for reconditioning.
Egg Powder ... ..	1	—	
Fats (Various) ... ..	4	—	
Fish (Canned, etc.)	8	—	
Flour ... ..	6	—	
Fruits (Canned) ... ..	2	—	
Fruits (Dried) ... ..	23	15	Sea-water damage—1,240 cwts. of currants and raisins and 4½ cwts. apricots condemned and released for animal feeding.
Fruit Pulp ... ..	6	—	
Grape Fruit ... ..	4	—	
Ham and Bacon ... ..	4	1	Contaminated with Barium and Zinc—reconditioned and passed for human consumption—½ cwt. of trimmings condemned.
Honey ... ..	1	—	
Lard ... ..	5	—	
Licorice ... ..	2	—	
Macaroni ... ..	2	—	
Meats (Canned) ... ..	12	—	
Milks (Canned) ... ..	8	—	
Milks (Dried) ... ..	12	1	Contaminated with dirt and debris—9 cwts. condemned.
Mineral Waters ... ..	1	1	Contents flat and moulds present — 1,704 ½-pint bottles condemned.
Oils (Various) ... ..	8	—	
Onion Powder ... ..	2	—	
Oranges ... ..	8	—	
Peas ... ..	2	—	
Rice ... ..	3	—	
Sugar ... ..	2	—	
Tartaric Acid ... ..	1	—	
Tea ... ..	10	—	
Vegetables ... ..	...	—	

*Imported Food Regulations.*—The Veterinary Surgeon has reported on the quantities of meat examined under these Regulations, and states that the following were condemned :—

Beef, Quarters ... ..	4,901	Pork, Sides ... ..	27
„ Cuts ... ..	2	„ Cuts ... ..	408
„ Trimmings ... ..	8	„ Bags ... ..	616
„ Trimmings, lbs. ...	11,855	„ Trimmings, lbs. ...	772
Mutton and Lamb, Carcases ...	6,141½	Fish, Boxes ... ..	4
„ Cuts ... ..	18	Offal, Ox Livers ... ..	17
„ Trimmings, lbs. ...	214	„ Sheep Livers, Cases ...	73
Sundries, Packings 450.			

*New Legislation.*—The Port Sanitary Regulations (Scotland), 1933, were amended during the year, the amendments to come into operation on 1st December, 1945. The following is a summary of the most important of the changes :—

These Regulations have been made by the Secretary of State for Scotland under section 78 of the Public Health (Scotland) Act, 1897, and the Public Health Act, 1904, to give effect to the International Sanitary Convention of 1944. The new Convention modifies certain provisions of the Sanitary Convention of 1926 and 1938, in the light of the present day conditions which call for special measures to prevent the spread by land and sea across frontiers, of epidemic or other communicable diseases.

In the new Regulations, article 2 lays down that the words “ Port Health Authority ” shall be substituted for the words “ Port Authority ” in the principal Regulations of 1933. Certain other definitions have been changed, and certain articles of the principal Regulations have been redrafted.

Article 13 of the principal Regulations now require the master of a foreign going ship, arriving from another port in the United Kingdom, to make a verbal declaration of all cases of sickness which have occurred within six weeks of him having submitted his original declaration of health on arrival in Great Britain from a foreign port.

Article 19 states that vessels arriving at a port from another port in Great Britain are to be considered for the purpose of renewal of Deratisation or Deratisation Exemption Certificates as if they had arrived from a foreign port.

Article 22 which deals with the medical examination of any person suspected to be suffering from plague, cholera, yellow fever, typhus and smallpox about to embark on a ship, while in port, is extended to include any other disease which has been the subject of a declaration by the Secretary of State.

Article 30 which sets forth the powers and duties of the Medical Officer and other Officers has been amended with a view to clarifying the scope of paragraph 30 (*f*) of the principal Regulations owing to certain doubts having arisen as to the interpretation of this paragraph. The amendment limits the powers of the Medical Officer of Health to the prescribed measures laid down in Schedule 4 of the principal Regulations, and prohibits him from requiring the ship to be used for isolation purposes, unless this can be done without delaying or unduly interfering with the movements of the ship.

Under article 23 a district which has been declared by the Secretary of State to be infected with plague, cholera or yellow fever, or any other disease which, in his opinion, constitutes a menace to other countries by reason of its spread or potential spread, or to be a district in which typhus or smallpox exists in an epidemic form, he may require the Medical Officer of Health to comply with any requirements made by him.

Paragraph 2 of article 33 is revoked, and provision is made for a tighter control of contacts under surveillance. In applying subparagraph (*c*) of this paragraph in the amended Regulations, the Medical Officer of Health may not instruct a contact during his period of surveillance to report to the Medical Officer of Health of any local authority, unless the Secretary of State has issued directions authorising the giving of such instructions.

Part D of schedule 4 which lays down the prescribed measures to be applied in cases of smallpox has been expanded and gives the Medical Officer of Health power to isolate contacts for a period of fourteen days, after the arrival of the ship. The terms "recent vaccination" and "immune reaction" are also defined.

The general effect of the amended Regulations is to tighten up Port Health administration, and to extend the powers of the Medical Officer of Health to deal with infectious diseases other than the five main convention diseases, namely, plague, cholera, typhus, yellow fever and smallpox.



The introduction of these new Regulations will necessitate the printing of the following :—

- (1) New Declarations of Health.
- (2) New Forms of Clearance given by Port Health Officers to H.M. Customs.
- (3) New International Certificates of inoculation against cholera, yellow fever, typhus and of vaccination against smallpox.

*Insect Infestation.*—Twenty-three ships were treated, during the year, for the extermination of food insect pests in the cargo carrying spaces on the instructions of the Ministry of Food Infestation Branch. All these fumigations were supervised by officers of this department. Twenty deratisation certificates were granted and of these only thirteen showed evidence of rat infestation.

*Modernisation of Latrine Accommodation at the Docks.*—The progress made during the year in this very desirable operation was fairly satisfactory considering the difficulties of obtaining supplies of material and labour. Three new shelters of modern design were commenced and two completed before the end of the year. The third is expected to be ready for use in the near future. These shelters were built to take the place of the old type of latrines in iron wrought shelters which have been demolished.

## SECTION VI.

## HOUSING

During 1945 the Corporation completed 463 permanent houses to which have to be added 86 temporary houses, making a total of 549 for the year. The following table shows the number of houses completed during the past eight years :—

1938	...	2,936	1942	...	1,124
1939	...	2,227	1943	...	931
1940	...	980	1944	...	484
1941	...	791	1945	...	549

The year has been mainly one of preparation and the total number of houses for which sites have been prepared reached almost 6,000, a considerable increase in previous years. There are still problems of materials and labour to be met, and lack of supplies of bricks and sanitary fittings provide bottle necks which have not yet been completely removed. Progress has been made in the construction of Swedish timber houses and houses constructed by non-traditional methods such as the Atholl and the Weir. At Balornock the Housing Department are erecting 200 Swedish houses and it has been decided to place a site at the disposal of the Scottish Special Housing Association for the erection of a further 100 timber houses. Other types for which contracts have been or are being arranged are the British Iron and Steel Federation house and the Wimpey's "No Fines" house.

In addition to houses for families the Housing Committee have erected during the year a women's hostel containing 36 dwellings in Carntyne and named Warriston Court. A similar hostel is in the course of erection in Sannox Gardens. A new venture for Glasgow is the proposal to erect a block of multi-storied flats, eight stories high, at Crathie Drive in the Partick area of the city and to contain 88 houses for single women. As in the former two examples each dwelling will contain a living-room with bed alcove, kitchenette and bathroom. It will be the first experiment of this type of construction in Glasgow and from it experience should be gained in the technical problems involved in building multi-storied dwellings. From the health point of view there are serious objections to the use of this type of dwelling for families with young children but no exception can be taken to the use of such buildings for adult families especially if they are constructed outwith the smoke belt of the city.

With reference to house property generally, there is a continued and steady deterioration in the structure and standard of upkeep of most types of property in the city. A considerable number of dwellings are known to be in a condition warranting closing and demolition and in others the owners have no money with which to carry out the repairs. Should serious defects occur requiring immediate repair, then the owners tend to desert the properties which either become derelict or the local authority must undertake the immediate and essential repairs to maintain the building in occupation. An endeavour is being made to obtain a ruling from the Secretary of State on the method to be adopted in dealing with these derelict or semi-derelict properties as the present legal powers are inadequate to deal with the situation.

The dissatisfaction felt with the state of repair of house property is again illustrated by a further rise in the number of applications for certificates under the Rent and Mortgage Interest Restrictions Acts, 1920-1939. The following table shows the number of applications made from 1938 to 1945 :—

1938	...	35	1942	...	3
1939	...	29	1943	...	51
1940	...	3	1944	...	81
1941	...	8	1945	...	437

Of the 437 applications for certificates during the year 1945, 406 were granted, 21 were refused and 10 were cancelled. There were 55 applications by house factors for repairs all of which were granted.

Statistics of decrowding in relation to houses vacated by families removed to new houses are shown in a table, as follows :—

#### DECROWDING OPERATIONS.

##### CONDITION OF VACATED HOUSES SINCE THE COMING INTO FORCE OF THE HOUSING (SCOTLAND) ACT, 1935.

Size of House.	No. of Houses inspected.	Over-crowding removed.	Over-crowding reduced.	Over-crowding unchanged.	Over-crowding increased.
One apartment ...	3,707	2,742	824	87	54
Two apartments ...	9,683	7,737	1,404	232	310
Three apartments ...	2,598	2,302	186	35	75
Four apartments and up ...	268	234	21	2	11
Total ...	16,256	13,015	2,435	356	450
		80·0%	15·0%	2·2%	2·8%

Out of 16,256 houses inspected subsequent to the transfer of the occupants to Corporation houses since the passing of the Housing (Scotland) Act, 1935, 20 per cent. were found to be again overcrowded compared with 19·8 per cent in 1944.

During the year 13 houses were represented by the Medical Officer of Health to the Housing Committee as uninhabitable.

### HOUSING ACTS.

#### NUMBER OF HOUSES REPRESENTED SINCE 1923 AND ACTION TAKEN.

Year.	Number of Houses represented.			Number of these Houses actually closed in each Year.		
	Under Slum Clearance Schemes	Under Closing and Demolition Orders	Together.	Slum Clearance Schemes.	Closing and Demolition Orders.	Together.
1917-1937 ...	8,635	8,278	16,913	8,545	7,605	16,150
1938 ...	—	467	467	89	914	1,003
1939 ...	36	275	311	2	347	349
1940 ...	—	157	157	—	213	213
1941 ...	—	52	52	—	74	74
1942 ...	—	4	4	—	13	13
1943 ...	—	46	46	—	47	47
1944 ...	—	19	19	—	19	19
1945 ...	—	13	13	—	12	12
Totals ...	<u>8,671</u>	<u>9,311</u>	<u>17,982</u>	<u>8,636</u>	<u>9,244</u>	<u>17,880</u>

With regard to the rehousing of tuberculous families, 437 recommendations were made to the City Improvements Department during 1945 of which 41 families have since been rehoused. In addition 83 families, recommended in previous years, were rehoused in 1945, making in all 124 for the year. This compares with a total of 166 families rehoused in 1944.

### INSPECTION OF HOUSING SCHEMES.

#### (a) CONDITION AS TO CLEANLINESS.

The number of houses in the various rehousing schemes reported on is 14,769.

Number of tenants under supervision at 1st January, 1945	14,750
Of which evicted or left owing rent during 1945 ...	15
Of which left voluntarily during 1945 ...	250
	<u>265</u>
Of which remaining at 31st December, 1945 ...	14,485
Number of tenants obtaining entry during 1945 ...	262
Of which evicted or left owing rent during 1945 ...	—
Of which left voluntarily during 1945 ...	—
	<u>262</u>
Of which remaining at 31st December, 1945 ...	14,747
Total number of tenants remaining as at 31st December, 1945	<u>14,747</u>

During 1945 the nurse inspectresses made 66,464 primary visits, the condition of the houses being recorded at the time of the visits as "Clean" 41,735, "Fair" 23,545, and "Dirty" 1,184. Further visits numbering 2,563 were made to the less satisfactory tenants.

At the beginning of the year 14,750 households were under supervision and at the end of the year 14,747—a decrease of 3. The number of new tenants was 262. There were 265 removals or 1·8 per cent. of the total occupancies.

The changes in the condition of the 14,485 households under supervision throughout the whole year were as follows:—

Condition at beginning of Year—	Condition at End of Year.				Group Percentages.
	Clean.	Fair.	Dirty.	Totals.	
Clean ... ..	8,848	231	—	9,079	62·7
Fair ... ..	454	4,650	32	5,136	35·4
Dirty ... ..	—	91	179	270	1·9
	<u>9,302</u>	<u>4,972</u>	<u>211</u>	<u>14,485</u>	<u>100·0</u>
Group Percentages ... ..	64·2	34·3	1·5	100·0	—

A similar table is given for the 262 tenants who obtained entry during the year and who were still resident in the schemes at the close.

Condition at date of entry—	Condition at end of year.				Group Percentages.
	Clean.	Fair.	Dirty.	Totals.	
Clean ... ..	99	21	—	120	45·8
Fair ... ..	8	133	1	142	54·2
Dirty ... ..	—	—	—	—	—
	<u>107</u>	<u>154</u>	<u>1</u>	<u>262</u>	<u>100·0</u>
Group Percentages ... ..	40·8	58·8	0·4	100·0	—

The condition prior to removal of the houses occupied by families who were evicted or left owing rent and by tenants removing voluntarily during the year is compared in the following table:—

Condition at date of removal—	Tenants Evicted during 1945.		Tenants Removing Voluntarily during 1945.	
	No.	Group Percentages.	No.	Group Percentages.
Clean ... ..	1	6·7	163	65·2
Fair ... ..	14	93·3	86	34·4
Dirty ... ..	—	—	1	0·4
	<u>15</u>	<u>100·0</u>	<u>250</u>	<u>100·0</u>

Of 14,747 houses occupied at the end of the year 9,408 were regarded as "Clean," 5,127 as "Fair," and 212 as "Dirty," representing 63·8 per cent., 34·8 per cent., and 1·4 per cent. of the total. The corresponding percentages for occupancies at the end of 1944 were 62·7 per cent., 35·5 per cent., and 1·8 per cent.

(b) BUG INFESTATION.

The total number of houses in which evidence of the presence of bed bugs was found was 160, or 1·0 per cent., which is the lowest percentage recorded. Analysis of this figure shows that only a "trace" of bed bugs was found in 31 houses, or 0·2 per cent., compared with 0·1 per cent. in 1944. In this group of houses only old hatched eggs or bug casts but no living bugs or eggs were found in the beds or on furniture, pictures or other household belongings. In 21 houses, or 0·1 per cent., compared with 0·2 per cent. in 1944, a "medium" degree of infestation was found, and by this is meant that living bugs or eggs were found in beds or on furniture, pictures or other household belongings but not in the structure of the building itself. This condition is readily remedied by the tenants by applying the ordinary methods of household cleansing under the direction of the nurse inspectresses. In 108 houses or 0·7 per cent., compared with 0·8 per cent. in 1944, a "serious" degree of infestation was found. In these houses living bugs or eggs or both were found in beds, on furniture or on picture rails, skirting or door facings. The eradication of bugs in these houses requires the co-operation of the tradesmen of the Maintenance Section of the Housing Department, whose procedure is to remove the infested woodwork from walls and apply the blow lamp directly or a contact insecticide. In the great majority of these houses infestation was detected at a fairly early stage by the nurse inspectresses. This is very important because it reduces to a marked degree the amount of interference with structures which has to be carried out by tradesmen. In no houses throughout the year was fumigation by a lethal gas adopted.

The table submitted herewith shows the progress made during the past twelve years in the prevention of bug infestation, which has fallen from 10·7 per cent. in 1934 to 1·0 per cent. in 1945. It should be noted that serious infestation has fallen during that period from 7·1 per cent., to 0·7 per cent. throughout the rehousing schemes. This progress is further proof that the preventative system which has been practised in Glasgow during the past twelve years is thoroughly sound, as it depends for its success upon the cleanliness of tenants and the supervision of them by the nurse inspectresses who are specially trained in the work of prevention of infestation by the bed bug.

## PROGRESS OF BUG INFESTATION PREVENTION IN REHOUSING SCHEMES.

Year.		Number of Houses Inspected.	Number of Houses in which Bed Bugs were found.				Percentage of Total Number of Houses			
			Trace.	M.I.	S.I.	Total.	Trace.	M.I.	S.I.	Total
1934	...	8,670	104	210	612	926	1.2	2.4	7.1	10.7
1935	...	10,576	218	368	378	964	2.1	3.5	3.6	9.2
1936	...	12,803	220	296	295	811	1.7	2.3	2.3	6.3
1937	...	13,676	253	165	304	722	1.8	1.2	2.2	5.2
1938	...	14,416	138	69	240	447	0.9	0.5	1.7	3.1
1939	...	14,609	79	62	168	309	0.5	0.4	1.2	2.1
1940	...	14,669	55	75	185	315	0.4	0.5	1.2	2.1
1941	...	14,731	51	65	94	210	0.3	0.4	0.7	1.4
1942	...	14,751	34	61	121	216	0.2	0.4	0.8	1.4
1943	...	14,769	25	51	120	196	0.2	0.3	0.8	1.3
1944	...	14,769	21	26	110	157	0.1	0.2	0.8	1.1
1945	...	14,769	31	21	108	160	0.2	0.1	0.7	1.0

Trace—Trace of Bugs.

M.I.—Medium Infestation.

S.I.—Serious Infestation.

## SECTION VII.

## BACTERIOLOGICAL LABORATORY.

The examinations performed in the Bacteriological Laboratory during 1945 numbered 69,930 as compared with 63,921 in the previous year. This figure includes 1,059 examinations of routine material by new or special methods either to control other results or to investigate new techniques.

*Equipment and Policy.*—The re-equipment of the laboratory with basically essential apparatus which was authorised in 1944 has been grossly delayed by supply difficulties but is now well in hand. The delivery of a large autoclave and centrifuge at the end of 1945 has markedly increased the laboratory potentialities. With the continued increase in specimens, however, new problems have arisen. Numbers have increased by 15,000 in the last two years and it is now manifestly impossible to apply to every specimen the multiplicity of tests which modern bacteriological knowledge suggests. Therefore the development of adequate and simple "screen" tests to eliminate frank negatives has become urgent. To this end much preliminary work has been done. As an example "Fluorescent Microscopy" for the detection of tubercle bacilli has been developed almost to the stage of routine application. Direct comparative examinations have been made of 352 sputa to determine the reliability and to confirm the anticipated advantage of the new method. Preliminary tests of 32 known positives produced identical results by fluorescent microscopy which also detected one positive in 100 specimens considered negative by the usual Ziehl-Neelsen method. Fluorescent microscopy thus appears to be reliable. Its advantage, however, lies in the saving of time. In 220 positive sputa examined in parallel, tubercle bacilli were detected by fluorescent microscopy in less than half the time required to find them by the older method. In this connection the ingenious technical work of Mr. Andrew and Mr. Wilson, senior technicians, has done much to develop the procedure to its present advanced stage.

In the serology of Venereal Disease, a very heavy item in the laboratory work, no such success has been achieved. The Berger Dye test, a simple slide test, which appeared to have possibilities as a reliable "screen" was investigated by Dr. Young. She found agreement between this test and the established tests in only 331 out of 361



routine blood sera examined. Of the 30 disagreements 25 were positive by Wasserman or Kahn and negative by Berger and 5 were negative by Wasserman or Kahn and positive by Berger. In no instance was there any conclusive evidence that the Berger test was more specific and its obvious lack of sensitivity rules it out as a "screen" test.

#### INFECTIOUS DISEASE—EPIDEMIOLOGICAL INVESTIGATIONS.

*Diphtheria.*—The epidemiological study of this disease was greatly facilitated by the decision to centralise in this laboratory the typing of the infecting strains from all patients admitted to the City's Infectious Diseases Hospitals. In addition, this gave the laboratory an opportunity under ideal conditions to compare the efficiency of its routine procedures established for many years, with the newer cultural methods which were applied to this investigation. The results showed that the latter gave only 5 per cent. more positives, a difference much less than that found by many other workers, and indicated that a high level in diphtheria diagnosis had been achieved by the simpler established procedure.

The increased work has been justified by the more complete epidemiological results obtained. Of the 1,418 strains typed, 708 (50 per cent.) were Gravis, 453 (32 per cent.) Intermedius, 187 (13 per cent.) Mitis, and 70 (5 per cent.) were Atypical. These figures show a slight decrease from last year of about 6 per cent. in Gravis infections and a compensatory increase of about 4 per cent. in Atypical strains. The rise in the latter variety was accompanied by a novel process of spontaneous cultural strain variation, which may be the first indication of a similar change occurring in the community. The process has been intensively studied by Dr. Carter and a description of it is being published.

*Dysentery.*—The high incidence of this disease, of particular moment in small juvenile communities as in Day Nurseries, remains an epidemiological problem of some magnitude. The mildness of the disease and the occurrence of numerous sub-clinical infections make detection difficult and control almost impossible, but the same factors together with the effectiveness of the newer Sulphonamide drugs make the whole clinical picture much brighter. During the year no epidemic rise in any particular type of infection was noted, but the Newcastle type of dysentery bacillus which began to spread in the community last year is now well established. Of the 1,719 positive stools examined *B.dysenteriae Sonne* was isolated on 1,074 occasions, *B.dysenteriae Newcastle* on 386, *B.dysenteriae Flexner* on 258, and *B.dysenteriae Shiga* in one case only.

*Gastro-Enteritis.*—No epidemic, such as occurred in 1944, was encountered this year. Sporadic cases in considerable numbers, however, have continued and the disease remains a very important problem. Investigational work in the laboratory is continuing, and it is gratifying to find that the lines of investigation begun in September anticipate those suggested by a Leading Article in the *Lancet* of 9th March, 1946.

*Gonorrhoea.*—From the clinical point of view the increasing number of Sulphonamide resistant cases is compensated by the promise of Penicillin. Both methods of treatment, however, with their rapid effect and the consequent brief period of observation of patients demand a very high standard in tests for cure. It is now universally agreed that bacteriological culture methods are the most effective. In the past this has been very difficult owing to the rapid death of gonococci in material during transport to the laboratory. The difficulty has now been overcome by a method evolved in this laboratory and it is hoped that it will prove of considerable value in the future. The method will soon be published.

In the retrospective determination of the aetiology in complaints possibly ascribable to late manifestations of this disease the Gonococcus Complement Fixation Test is the only one of any help. Since the reputation of this test is very variable, it seemed desirable to investigate the matter in relation to the laboratory's own technique. 346 specimens of serum were tested in duplicate using antigens provided by two reputable firms. The results agreed in 261 cases and disagreed in 85. These disagreements could not be ascribed to the greater sensitivity of one antigen over the other but were obviously ascribable to some individual difference in their specificity. That such a considerable discrepancy should be possible in a carefully controlled procedure shows clearly why some clinicians consider the test good, some bad; and also stresses the need for close clinical collaboration with all laboratory work.

*Infective Hepatitis.*—No dependable clinical or laboratory test has yet been evolved for this common but highly variable malady. It was hoped that the precipitin reaction described in 1945 by Olitzki and Bernkopf might prove useful but early work showed it to be almost completely unreliable and it has been abandoned.

*Leptospirosis.*—One hundred specimens were examined in connection with this disease but many were from outside the Glasgow area. In the City only one case occurred in each of the two occupations known to be especially liable, sewer workers and slaughterhouse workers. Both patients recovered although one was very seriously ill. At the invitation of the City Engineer talks were given on the subject to Corporation sewer workers and protective vaccination was offered.

At the request of the Army Vaccine Laboratory a number of blood specimens received from soldiers of the British Liberation Army in France were examined to elucidate a peculiar clinical condition occurring among these troops. An unusual strain of leptospira was found to be responsible for certain of the disorders and in collaboration with an Army bacteriologist a paper on the subject has been published. Among studies on the epidemiology of leptospirosis may be mentioned the discovery of the first case of *Leptospirosis canicola* in Britain. *Leptospira canicola* is carried and transmitted solely by dogs and the patient was a London boy. The disease was identified by the examination of specimens sent to Glasgow from a Middlesex hospital. A communication on the subject has been submitted to the *Lancet*.

#### PUBLIC HEALTH—GENERAL CONTROL.

*Milk Supply.*—The number of samples tested biologically for tubercle bacilli was 893. Tubercle bacilli were detected in the city milk supply in 2·7 per cent. of 400 undesignated samples, and in 3·1 per cent. of 96 designated samples. The hospital milk supplies and the pasteurised milk issued to schools were free from such infection in 198 samples and 151 samples respectively examined. From other Local Authorities 48 samples were received, one of which was tuberculous.

The milk supplies of the city, as well as those supplied to schools—929 samples in all—were on the whole similar in bacterial content to those of the previous year. The results found with hospital supplies (246 samples) and with graded milks (496 samples) examined for the Health Department were similar to those reported for the year 1944.

*City Water Supply.*—592 samples from the reservoirs and other sources were examined during the year, and reported upon to the Health and Water Departments.

*Public Baths Water.*—206 samples from thirteen swimming ponds were examined and reported to the Baths Department, thus providing information upon the effects of filtration and chemical treatment.

## PUBLICATIONS.

Mud Fever in the British Army in France. F. E. Buckland and R. D. Stuart. 1945. *The Lancet*. ii. 331.

## SUMMARY OF EXAMINATIONS FOR THE YEAR, 1945.

## CITY OF GLASGOW. INFECTIOUS DISEASES.

					<i>Positive.</i>	<i>Total.</i>
<i>Diphtheria and General Throat Infections—</i>						
Diphtheria	...	Suspects	...	...	863	9,304
		Control	...	...	1,275	2,807
		Typing	...	...	...	1,418
		Virulence	...	...	...	145
Streptococci	...	Throat and nose	...	...	31	353
Vincent's organisms	...	...	...	...	65	258
<i>Enteritis.</i>						
Enteric Fever	...	Suspects	...	...	56	436
		Control	...	...	183	1,006
Food poisoning	...	Foodstuffs	...	...	...	11
		Specimens from patients	...	...	...	86
Dysentery Bacillary	...	Suspect	...	...	1,314	6,019
		Control	...	...	405	3,258
Amoebic	...	...	...	...	...	39
Other forms	...	...	...	...	...	13
<i>Miscellaneous—</i>						
		Blood	...	...	...	125
		Body fluids	...	...	...	89
		Exudates	...	...	...	27
		Excretions	...	...	...	49
<i>Tuberculosis—</i>						
		Sputa	...	...	1,062	5,402
		Gastric washings	...	...	...	239
		Pus	...	...	...	67
		Urine	...	...	...	147
		Faeces	...	...	...	12
		Pleural fluid	...	...	...	59
		Etc.	...	...	...	27
<i>Veneral Disease—</i>						
		Wassermann Test	...	...	...	12,853
		Kahn Test	...	...	...	15,499
		Gonococcal Smears and Complement Fixation	...	...	...	1,792
		Colloidal Gold Test	...	...	...	57
		Ophthalmia neonatorum	...	...	...	909

CITY OF GLASGOW. GENERAL PUBLIC HEALTH.							<i>Positive.</i>	<i>Total.</i>
City Milk Supplies	...	...	...	...	...	...	2,065	
Hospital Milk Supplies	...	...	...	...	...	...	444	
Milk Bottles, ice cream, etc.	...	...	...	...	...	...	67	
Water Supplies	...	...	...	...	...	...	478	
Water Department	...	...	...	...	...	...	100	
Baths Department	...	...	...	...	...	...	206	
PORT HEALTH AUTHORITY.								
Water	...	...	From ships, etc.	...	...	...	14	
Anthrax—hides and skins	...	do.	...	...	...	...	46	
Plague—rats	...	do.	...	...	...	...	531	
Miscellaneous	...	do.	...	...	...	...	8	
H.M. & ALLIED FORCES.								
Venereal Diseases	...	...	...	...	...	...	1,622	
Diphtheria	...	...	...	...	...	...	325	
Vincent's organisms	...	...	...	...	...	...	91	
Haemolytic streptococci	...	...	...	...	...	...	37	
Dysentery	...	...	...	...	...	...	65	
Tuberculosis	...	...	...	...	...	...	71	
Miscellaneous	...	...	...	...	...	...	77	
OUTSIDE AUTHORITIES.								
Swabs for Diphtheria	...	...	...	...	...	...	23	
Leptospirosis—Schuffner tests	...	...	...	...	...	...	35	
Milks	...	...	...	...	...	...	48	
Miscellaneous	...	...	...	...	...	...	12	
							68,871	

CONTROL.—Specimens from hospital cases, contacts, etc.

## SECTION VIII.

## FOOD.

*Food Poisoning.*—In January, a married woman was admitted to hospital with a history of vomiting and diarrhoea. The provisional diagnosis of enteric fever was, on further examination, altered to food poisoning. No pathogenic organisms were discovered and the source of illness could not be established.

Within three to four hours of eating some luncheon meat seven members of three unrelated families became ill with sickness, vomiting and abdominal colic. All the circumstances suggested a bacteriological contamination of the luncheon meat, but as a result of delay in submitting the material for examination, no food poisoning organisms were discovered.

On the 21st March, a young woman became ill with symptoms suggestive of gastro-enteritis. These symptoms persisted until her removal to hospital on the 26th March as a suspected case of enteric fever. In hospital bacilli aertrycke was found in her stools. A likely source of the infection was some Spam which had also been eaten by the other members of the household. One person sickened five days after the patient, but no organism was recovered from the faeces of this case and the cause of the gastro-intestinal upset was not determined.

On his return from holiday in July, a man sickened with enteritis and was removed to hospital as a case of Paratyphoid B. Five days after his removal to hospital, a child of three had diarrhoea, but examination of the faeces proved negative. The mother was unaffected, but routine examination of her faeces revealed a *Salmonella Monte Video*.

An elderly woman convalescing from an attack of pneumonia became ill on the 17th August with symptoms suggestive of paratyphoid B, and was removed to hospital. The other six inmates of the household were unaffected. The patient had been on a light, chiefly milk, diet, but had, prior to this attack, eaten some salmon sandwiches and some Spam. A positive finding of *Salmonella Typhi-murium* was made eight days after her admission to hospital.

Later in the month two adult members of a family were removed to hospital as cases of acute gastro-enteritis, probably food poisoning. A probable source of the illness was some mutton, pot-roasted, which had been eaten on two occasions. No material, however, was available for bacteriological examination. Both patients were definitely ill and the symptoms suggested acute food poisoning, but bacteriological examination of the faeces failed to discover any pathogenic organism.

In the same month, a young married woman returning from a holiday at the coast, became sharply ill with abdominal pain and diarrhoea and was removed to hospital as a case of dysentery. Serological and bacteriological examinations proved positive for *Salmonella Typhimurium*. No other member of the household in which she had spent the holiday was affected, and the only food consumed immediately prior to her illness was milk and an egg. The source of this infection was not established.

A married woman and her three young children were admitted to hospital on the 28th August suffering from Sonne dysentery. Confirmation of this diagnosis was obtained in each case by isolation of this organism from the faeces. In addition, an organism of the *Salmonella* group, *Salmonella Enteritidis*, was isolated from the faeces of the two younger children. The source of the infection remains unknown as the date of onset of the symptoms were obscured by the simultaneous infection with *B. Dysenteriae Sonne*.

In the Autumn of 1945 there occurred from an unknown source a familial outbreak of *S. Typhimurium* infection comprising a fatal case in an adult chronic invalid consuming a restricted dietary and two mild cases in children aged three and two years respectively, after their father and two positive adult female symptomless contacts. The patients suffered from diarrhoea without blood or mucous. The children returned positive specimens for several weeks after clinical recovery.

In September, a middle-aged woman employed part-time in a Forces' Canteen suddenly developed attacks of shivering and spells of vomiting and diarrhoea. Three weeks later she was admitted to hospital as suspected typhoid fever, but there her faeces and urine were reported positive for *Salmonella Enteritidis*. The source of the infection was not discovered nor were any associated cases found.

In the same month a young child sickened with headache and abdominal pain and was removed to hospital where an indefinite illness persisted for two or three days before the condition settled. His clinical condition did not suggest food poisoning, but a specimen of his faeces submitted as a routine measure proved positive for *Salmonella* Enteritidis. None of the other nine members of his family were affected and specimens of their faeces proved negative for pathogenic organisms. The child had had ice cream and candied apples which had not been shared by the rest of the family and he had been seen drinking dirty water from a choked drain at the back of the property.

An elderly woman became ill on the 29th September with vomiting, abdominal pain and diarrhoea. The illness, which did not appear serious, lasted for about ten days and except for a day or two at the onset, the patient was not confined to bed. On the 14th October however, there was a recurrence of all the symptoms and blood appeared in the stools. The woman was removed to hospital next day as suspected enteric fever, and died suddenly on the 21st, cause of death being severe toxæmia accompanied by diarrhoea. *Salmonella* Typhi-murium was isolated from faeces and urine. No other person associated with the patient is known to have had diarrhoea and the source of infection by this organism is unknown. The patient had not been well for about a year previously, during which time she had been subject to diarrhoea. This would cause a lowering of her resistance.

*Aerated Waters.*—Only one case of illness resulting from the drinking of aerated waters was reported during the year. In this instance some small fragments of solid matter were found in a bottle of Kola after part of the contents had been taken. Microscopical examination showed this solid matter to be vegetable tissue resembling the skin of a berry or seed. Adhering to the tissue were small portions of printed paper. No harmful substances could be detected in the remaining liquid contents.



SUMMARY OF OPERATIONS UNDER THE FOOD AND DRUGS (ADULTERATION) ACT; THE MILK AND DAIRIES ACTS; AND ALLIED ACTS AND ORDERS FOR THE YEAR ENDED 31st DECEMBER, 1945.

*The Food and Drugs (Adulteration) Act, 1928.*—In the course of the year the number of different articles of food and drugs examined equalled 123. This included a wide range despite the present-day difficulties in obtaining samples of food for examination. A total of 3,424 samples were submitted for examination made up of 1,241 formal and 2,183 informal; 45 (3·68 per cent.) of the formal and 44 (2·01 per cent.) of the informal samples were reported as being adulterated. This is only slightly different from last year, the figures then being, formal samples adulterated 36 (2·88 per cent.) and informal samples adulterated 56 (2·67 per cent.). Thirty-nine prosecutions were taken against offenders and thirty-three convictions were obtained. Of the cases dealt with all were first offences. Fines imposed totalled £124. There were no contraventions for margarine offences.

ABSTRACT OF TOTAL SAMPLES EXAMINED DURING 1945.

Article.	Informal.		Statutory.		Percentage adulterated.		Percentage of Samples taken in each Group to Total.	
	Taken	Non-Gen.	Taken.	Non-Gen.	Infor. %	Stat. %	Infor. %	Stat. %
Milk and Cream ... ..	1,641	27	718	20	1·64	2·79	75·17	57·87
Milk Products (Butter, Cheese, etc.) ... ..	3	—	29	—	—	—	0·14	2·33
Meats and Meat Food Products ... ..	50	4	168	17	8·00	10·12	2·29	13·53
Cereals, etc. ... ..	73	—	48	—	—	—	3·34	3·86
Spirituous Liquors ... ..	7	2	7	5	28·57	71·43	0·32	0·56
Drugs ... ..	149	11	87	3	7·38	3·45	6·83	7·01
Flavourings and Condiments ... ..	128	—	58	—	—	—	5·86	4·69
Miscellaneous Foods ... ..	132	—	126	—	—	—	6·05	10·15
	2,183	44	1,241	45	2·01	3·63	100·00	100·00

ABSTRACT OF INFORMAL AND STATUTORY SAMPLES OF SWEET MILK  
EXAMINED DURING 1945.

Month.	Informal.				Statutory.			
	No. examined.	No. pre-sumed Non-Gen.	Average per-centage Composition.		No. examined.	No. pre-sumed Non-Gen.	Average per-centage Composition.	
			Fat. %	Non-Fat. %			Fat. %	Non-Fat. %
January ...	142	—	3.80	8.78	62	1	3.70	8.83
February ...	162	4	3.72	8.64	68	2	3.72	8.81
March ...	137	4	3.67	8.61	71	4	3.57	8.69
April ...	153	4	3.70	8.49	67	4	3.64	8.65
May ...	115	3	3.64	8.76	66	4	3.51	8.80
June ...	147	—	3.66	8.79	58	—	3.59	8.89
July ...	110	3	3.68	8.72	42	1	3.58	8.83
August ...	107	2	3.76	8.67	48	1	3.64	8.74
September ...	88	1	3.80	8.73	54	—	3.71	8.79
October ...	167	4	3.99	8.80	59	—	3.91	8.87
November ...	154	2	3.90	8.84	58	1	3.97	8.97
December ...	159	—	4.20	8.83	65	2	3.78	8.77
	1,641	27	3.79	8.72	718	20	3.69	8.80
		1.65%				2.78%		

*Artificial Cream Act, 1929.*—There are no manufacturers or dealers in the City registered with the Food and Drugs Authority.

*The Public Health (Preservatives, etc., in Food) Regulations.*—For contraventions of the Regulations, 14 cases were dealt with in Court compared with 8 cases last year. The foodstuffs concerned were butcher's mince, 5 samples of which were found to contain preservative during the prohibited period, October to May, and 9 samples of sausages which contained an excess of preservative. The following list shows the foods in which preservatives were found, along with the nature of preservative and the amount :—

ABSTRACT OF ARTICLES OF FOOD IN WHICH PRESERVATIVES, ETC., WERE FOUND, AND THE NATURE AND AMOUNT DURING YEAR ENDED 31ST DECEMBER, 1945.

Nature of Article.	Number examined.	Number in which Preservatives, &c., were found.	Nature of Preservative, &c.	Parts per Million.	
				Highest.	Lowest.
Aerated Waters ...	4	2	Sulphur Dioxide	512	18
Apricots, Dried ...	5	5	"	1,600	326
Gelatine ...	12	11	"	700	128
Margarine ...	42	42	Boron	0.20%	0.10%
Mince ...	34	15	Sulph. Dioxide	1,212	26
Peaches, Dried ...	11	10	"	832	76
Raisins ...	5	1	"		345
Sauces ...	25	1	"		Trace
Sausage Meat ...	1	1	"		256
Sausages ...	129	99	"	1,616	12
Semolina ...	25	1	"		44
Soya Flour ...	7	1	"		25
Sultanas ...	9	2	"	64	64
	<u>309</u>	<u>191</u>			

*The Milk (Special Designations) Orders (Scotland), 1936-44.*— Fifty-five samples of Certified and Tuberculin Tested milk were examined biologically for the presence of tubercle bacilli. None was found positive. Thirty-six samples of Standard milk were also examined and three were found tuberculous. The herds concerned were immediately examined by a veterinary inspector of the Ministry of Agriculture and Fisheries and the producers affected were required to send their milk for pasteurising to a pasteurising establishment in the City. The number of licenced pasteurising establishments is now ten, an increase of three from last year, and the number of licences granted for the heat treatment of milk under the Heat Treatment Order is 11. The holders of these licences are entitled to a halfpenny per gallon of milk processed. This halfpenny is paid by the Ministry of Food from the time the dairy plant is licensed by the local authority. Thereafter, sampling is regularly carried out of Pasteurised and Heat Treated milk, a report being submitted of the results at the end of each month to the Department of Health for Scotland.

The different grades of designated milk dealt in by dairymen are shown in the following table, along with the average daily quantities sold in the City. The number of producers, dealers, pasteurising, heat treatment and bottling establishments licensed in terms of the Milk (Special Designations) Orders is also included.

	1945.	1944	1943.
<b>CERTIFIED—</b>			
Producers ... ..	1	1	—
Dealers ... ..	224	217	222
Total Average Daily Sales (Gallons) ... ..	1,211	852	663
<b>TUBERCULIN TESTED—</b>			
Producers ... ..	10	7	8
Bottling Establishments ... ..	6	6	6
Dealers ... ..	476	406	407
Total Average Daily Sales (Gallons) ... ..	*2,806	†2,519	‡1,751
<b>STANDARD—</b>			
Producers ... ..	15	20	20
Bottling Establishments ... ..	—	—	—
Dealers ... ..	—	—	—
Total Average Daily Sales (City Producers only) (Gallons) ... ..	853	1,115	1,044
<b>PASTEURISED—</b>			
Pasteurising Establishments ... ..	10	7	8
Dealers ... ..	579	300	299
Total Average Daily Sales (Gallons) ... ..	50,860	42,445	40,089
<b>HEAT TREATED—</b>			
Heat Treating Establishments ... ..	11	—	—
Dealers ... ..	207	—	—
Total Average Daily Sales (Gallons) ... ..	12,289	—	—
* Includes 760 gallons Tuberculin Tested (Pasteurised).			
†	891	“	“
‡	802	“	“

Samples of the foregoing, taken during the year, numbered 499. All were submitted to the City Bacteriologist and the City Analyst for examination regarding their conformity with the requirements of the Orders. In the following table the results are set out in detail :—

## RESULTS OF EXAMINATIONS OF DESIGNATED MILKS.

BACTERIOLOGICAL EXAMINATIONS —	CERTIFIED.	TUBERCULIN TESTED.	STANDARD.
	(a) Not more than 30,000 Bacteria per ml. 1/10 ml.	(a) Not more than 200,000 Bacteria per ml. (b) No Coliforms in 1/100 ml.	(a) Not more than 200,000 Bacteria per ml. (b) No Coliforms in 1/100 ml.
Number examined ...	71	114	132
Number conforming to all requirements ...	48	76	92
Number exceeding count only ...	7	7	13
Number conforming to count and having coliforms present ...	9	9	10
Agar Count per ml. { Highest ...	1,000,000 +	22	17
{ Lowest ...	400	1,000,000 +	1,000,000 +
Presence of Coliforms { + ...	55	500	1,000
{ ...	16	83	105
CHEMICAL EXAMINATION —	70	114	27
Fat Minimum 3% { Number 3% or over ...	1	—	131
{ Number below 3% ...	3-92	—	(one not examined).
Average Butter Fat content ...	—	3-98	3-98

BACTERIOLOGICAL EXAMINATIONS —	CERTIFIED.	TUBERCULIN TESTED.	STANDARD.
	(a) Not more than 30,000 Bacteria per ml. 1/10 ml.	(a) Not more than 200,000 Bacteria per ml. (b) No Coliforms in 1/100 ml.	(a) Not more than 200,000 Bacteria per ml. (b) No Coliforms in 1/100 ml.
Number examined ...	14	114	54
Number conforming to requirements ...	8	79	46
Number exceeding count only ...	2	Not applicable	Not applicable
Number exceeding count and having coliforms present but not exceeding 2-3 L.B. Units ...	1	Not applicable	Not applicable
Number conforming to count but having coliforms present and not exceeding 2-3 L.B. Units ...	3	Not applicable	Not applicable
Number having coliforms and exceeding 2-3 L.B. Units ...	—	Not applicable	Not applicable
Number having coliforms but not exceeding 2-3 L.B. Units ...	—	3	Not applicable
Number having no coliforms but exceeding 2-3 L.B. Units ...	—	14	Not applicable
Number exceeding 2-3 L.B. Units but showing no decolorisation	Not applicable	16	Not applicable
Agar Count per ml. { Highest ...	54,000	Not applicable	Not applicable
{ Lowest ...	400	Not applicable	8
Presence of coliforms { ...	10	Not applicable	Not applicable
{ ...	4	Not applicable	Not applicable
Fat Minimum 3% { Number 3% or over ...	14	95	Not applicable
{ Number below 3% ...	—	113	Not applicable
Average Butter Fat content ...	—	3-72	54
	—	3-72	—
	—	3-74	3-81

The table shows that 70·54 per cent. of the samples examined were in compliance with the standards required, as compared with 71·71 per cent. last year. Chemical examination showed all the samples to consist of genuine milk.

*Supplies of Designated Milk to Corporation Hospitals, etc.*—Only Tuberculin Tested and Pasteurised milk is supplied to Corporation hospitals and institutions. This milk is provided by the Corporation's own farms, by various producers, and by some milk contractors. The approximate average amount delivered daily was 2,289 gallons. Of this, 1,632 gallons were Tuberculin Tested and 657 gallons were Pasteurised. Two hundred and twenty-two samples of Tuberculin Tested milk were examined by the plate count, and 155 were found to conform with the Regulations. This shows a percentage of 70, which is 2 per cent. lower than last year. Of 33 samples of Pasteurised milk, 5 were found satisfactory. One hundred and ninety-six samples of Tuberculin Tested and Pasteurised milk were examined for the presence of tubercle, and none was found positive. In addition, 595 samples were chemically examined and one was found to be below the presumptive standard set up by the Sale of Milk Regulations. The average fat content of the milk samples was found to be 3·87 per cent.

*Examination of Ordinary Market Milk for the Presence of Tubercle.*—Milk arriving at City dairies from producers is regularly sampled and submitted for biological examination. During the year 308 samples were examined in the Department's laboratory and 4 were found to be tuberculous, giving a percentage of 1·30 as against a percentage of 3·58 in the previous year. This is an encouraging and satisfactory figure showing about one-third of the incidence of last year which year itself had a percentage considerably lower than any year previously. Such a low figure is certainly due to the eradication of tubercle from dairy herds and to the increasing amount of tuberculin tested milk arriving in the City. The following table gives the figures for the year, along with the figures of the two previous years, and also gives the county in which the milk was produced :—

SAMPLES OF PRODUCERS' SUPPLIES EXAMINED FOR THE PRESENCE OF  
TUBERCLE.

County.	1945		1944		1943	
	No. Examined.	No. Tuberculous.	No. Examined.	No. Tuberculous.	No. Examined.	No. Tuberculous.
Ayr ... ..	230	2	158	2	171	9
Bute ... ..	—	—	—	—	3	—
Dunbarton ... ..	—	—	12	1	8	—
Glasgow ... ..	—	—	1	—	3	—
Lanark ... ..	33	1	85	5	50	2
Renfrew ... ..	36	1	14	—	59	5
Stirling ... ..	9	—	37	3	18	1
	<u>308</u>	<u>4</u>	<u>307</u>	<u>11</u>	<u>312</u>	<u>17</u>

*Bacterial Counts of Ordinary Market Milk supplied to the City.*—  
Three hundred and fifty samples were examined for the number of bacteria and the presence of coliform bacillus. The results are shown in the following table :—

BACTERIAL COUNTS OF ORDINARY MARKET MILK SUPPLIED TO THE  
CITY.

Number Examined.	Average number of Bacteria per ml.					Coliforms in 1/100 inl. (2 days).	
	Under 100,000	100,000 to 200,000	200,000 to 500,000	500,000 to 1,000,000	Over 1,000,000	—	+
350	230	40	32	21	27	270	80

Viewed from the number of bacteria found, 155 (67·39 per cent.) of the 230 samples with less than 100,000 bacteria per millilitre were of certified quality, compared with 152 (71·36 per cent.) of the 213 with less than 100,000 in 1944. Two hundred and seventy (77·14 per cent.) of the total number of samples taken were equal to Tuberculin Tested quality, compared with 240 (77·17 per cent.) in 1944. Coliforms were absent in 270 (77·14 per cent.), compared with 222 (71·38 per cent.) in 1944. The 350 samples were also submitted for chemical analysis; 43 were found low in non-fatty solids. The average fat and non-fat content of the samples was 3·72 and 8·79 per cent., respectively.

*Raw Milk as Retailed in the City.*—Fifty-four samples of raw milk as retailed were taken from shops and carts in the City. One of 27 (3.70 per cent.) was found positive for tubercle bacilli compared with 3 of 55 (5.45 per cent.) last year. Adverse results when received are communicated to the Medical Officers of Health of the districts where the milk was produced, and steps are taken meanwhile to prevent the sale of any infected milk. This raw milk, supplied usually by wholesale and retail producers, decreases in quantity each year.

All the samples were examined for the number of bacteria and the presence of coliforms. Results are detailed in the following table :—

BACTERIAL COUNTS OF RAW (UNTREATED) MILK AS RETAILED IN THE CITY.

Number Examined.	Average number of Bacteria per ml.						Coliforms in 1/100 ml. (2 days).	
	Under 30,000	30,000 to 100,000	100,000 to 200,000	200,000 to 500,000	500,000 to 1,000,000	Over 1,000,000	—	+
54	23	11	11	8	—	1	43	11

*Milk to School Children.*—Only milk of pasteurised quality is supplied to the schools. The milk is supplied by four contractors and is sampled regularly. One hundred and seventy-three samples were examined during the year in terms of the Milk (Special Designations) Orders. Sixty-nine of 173, equal to 40 per cent., failed to pass the test, which is a very exacting one.

Below is shown a table giving a summary of results of the sampling. Another table shows the average daily quantity supplied, computed on a monthly basis, along with the number of school days which occurred in each month :—

SCHOOL MILK, 1945 (PASTEURISED).

No. Examined	No. passing both Phosphatase and Coliform tests.	No. failing Phosphatase Test only.	No. failing Coliforms Test only.	No. failing both.	No. Tuberculous.	Average Fat Solids.	Average Non-Fat Solids.
173	104	15	44	10	—	3.69	8.60



## AVERAGE DAILY QUANTITIES SUPPLIED.

Month.	Gallons.	School Days.	Month.	Gallons.	School Days.
January ...	5,372	17	July ...	—	—
February ...	5,132	20	August ...	1,137	21
March ...	5,388	23	September ...	5,445	18
April ...	5,501	15	October ...	4,594	20
May ...	5,290	17	November ...	5,251	24
June ...	5,020	25	December ...	5,342	15

*Milk Summary.*—There is some improvement in labour conditions in the larger dairies but improvement is still slow. Where experienced men have returned from service to their old posts the difference in the manner in which the work is carried out is appreciable. Delivery and installation of new dairy plant has been effected in several instances and the outlook is now more hopeful than it was at this time last year. There were also fewer complaints regarding the early souring of milk, with the exception of that from two creameries which, though removed from the Dairy Register by the Committee on Health, still function pending their appeal being heard by the Sheriff. The delay in dealing with these cases appears to be unavoidable and is to be regretted.

This year saw the introduction of premiums for the heat treatment of milk, a measure introduced by the Government in a White Paper to improve the Nation's milk supply. Under this scheme some twenty-one City dairies have been granted licences to heat treat and to pasteurise milk. Samples are taken regularly, results of which are forwarded to the Department of Health. The premium paid by the Ministry of Food amounts to one halfpenny per gallon of milk treated. One large creamery in the City will therefore receive something in the region of nine to ten thousand pounds per annum. Others will receive in accordance with their turnover. Of 308 samples of milk taken on arrival at City creameries from surrounding counties, 4 only were found tuberculous, showing an incidence of 1.30 per cent. This is a very satisfactory and encouraging improvement, the lowest yet recorded, and can be accounted for by the increased supply from tuberculin tested cows.

The quantity of milk supplied to school children was approximately the same as last year, viz., 53,472 gallons. Sampling showed 104 of 173 samples to fully comply with an exacting test, while 15 and 44 samples failed in one of the two tests applied, and 10 failed in both tests. No sample was found tuberculous and the chemical content of the milk was good.

*Inspection of Food and Food Premises.* To ensure compliance with the various Acts and Regulations, 10,026 inspections were made by the Food Inspectors of markets, stores, shops, and places where food is dealt with. Two thousand, three hundred and eight lots of food were reconditioned or passed as suitable for animal food only or destroyed. The total amount equalled 221 tons, 6 cwts., and consisted chiefly of canned foods as follows:—meat, milk, fish, vegetables, and fruit; also fresh vegetables, cereals, biscuits, dried fruit, and other miscellaneous articles. Shops, stores, etc., were generally found in a commendable condition.

Under the Public Health (Meat) Regulations (Scotland), 1932, ten premises were registered and certificates of approval of storage accommodation issued in respect of them. Thirty-three copies of certificates were issued in connection with vehicles operating from these premises.

*Fertilisers and Feeding Stuffs Act, 1926.*—Fifteen samples of feeding stuffs and 2 samples of fertilisers were procured during the year and submitted to the Agricultural Analyst for examination. One sample was found to be deficient in oil. All the others were reported upon as conforming with the terms of the Act. No request was received during the year for any samples to be taken. All results have been duly reported to the Department of Agriculture for Scotland.

*Dairies.*—Dairies on the register at the end of the year numbered 1,466, compared with 1,474 last year. This is a decrease of 8. This number consists of the following:—52 producers, 16 wholesalers, 47 wholesale and retail dealers, 611 retailers of loose milk, 732 retailers of bottled milk only, and 8 carts from without the district. A qualified certificate of registration is granted where milk is supplied only in properly capped and sealed bottles as received from the wholesaler. This certificate is granted where the shop does not fully satisfy the terms of the dairy bye-laws. The percentage of these dairies is 49·90 of the total number registered, compared with 49·12 per cent. in 1944. During the year, 15,719 inspections were made of dairies and 54 contraventions were dealt with. In 91 instances repairs and alterations were carried out as requested. Two of the larger firms of City dairymen who have contravened the dairy bye-laws on several occasions in a serious respect and been found guilty and fined at different times, were brought before the Health Committee who, after interviewing their representatives and considering the circumstances of the offences, decided to instruct the Town Clerk to have their names removed from the Register. The firms concerned have lodged appeals to the Sheriff and the appeals are pending.

An employee of a City firm was found adding water to milk and transferring milk from one vessel to another in unregistered premises. He was fined £5 for each offence. An employee of another firm was fined £2 for transferring milk from vessels in similar circumstances. Two creamery firms were fined £4 and £3 respectively for failing to keep dairy appliances clean and failing to take precautions to prevent contamination of milk.

*Byres.*—There are 52 producers in the City, having 64 byres. Four hundred and twenty-five inspections were made of these byres, which were found to be generally well kept. Repairs were carried out in 2 instances and one contravention of the bye-laws corrected. There is provision for 1,665 cows in the byres and the average number kept is 1,571. Only in one instance are no grazing facilities provided for the herd.

*Exempted Persons.*—There are three byres in the City where persons keep cows for their own use. The number kept averages 4. In addition, the Public Health Department have two attested herds within the City, the number approximating 459 animals. Milk is produced for use in Corporation institutions only. All these byres are regularly supervised and found to be well kept.

*Food and Drugs (Adulteration) Act, 1928, Section 8—Registration of Butter Factories and Wholesale Dealers in Margarine, Etc.*—Twenty butter factories, 150 wholesale dealers in margarine, and one margarine factory are on the register. Visits were paid to these premises in the course of the year, and no contravention was found. Samples taken were reported upon satisfactorily by the City Analyst. Details of the number on the register at the end of the year are as follows :—

Margarine factories ... ..	1
Wholesale dealers in margarine ... ..	150
Factories of or wholesale dealers in milk blended butter	—
Butter factories ... ..	20

*Ice-cream Shops.*—The number of persons on the register of ice-cream dealers in the City at the end of the year was 427, which is 24 less than the number for the previous year. Three thousand, one hundred and three inspections were made of these premises as a result of which repairs were carried out in 18 instances and 5 contraventions were corrected. One person was fined £3 for carrying on business without being registered and for having a dirty vehicle.

*Cleanliness of Milk Bottles.* The methods of bottle washing adopted in some of the smaller dairies in the City are unsatisfactory and in order to get information as to bottle cleanliness and sterility 48 bottles were obtained from dairies at intervals during the year and submitted to the City Bacteriologist for examination. A recognised standard of cleanliness fixes a maximum of 600 organisms per pint bottle. Of the 48 bottles examined, 27 were found satisfactory and 21 unsatisfactory. Letters cautioning and informing defaulters of the condition of the bottles examined were sent in each case. The designs of bottle-washing machines generally in use in the larger dairies are the soaker sprayer and jet types, while the methods employed in the smaller establishments are washing by means of rotary brushes and by hand brushes. The results disclosed by the different methods are as follows:—

	No.	Satisfactory.	Un- satisfactory.
Washed by soaker sprayer type machine ... ..	9	8	1
Washed by jet type machine ... ..	22	17	5
Washed by rotary brushes ... ..	9	1	8
Washed by hand brushes ... ..	8	1	7

These figures show the entirely unreliable and unsatisfactory results from rotary brushes and from hand brushes.

One dairyman was fined £2 for using a bottle for the holding of milk which bottle had not been thoroughly washed before being filled.

#### THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.

*Details of Samples, etc., in which Proceedings were Instituted during 1945.*

Number of complaints.	Nature of sample and alleged offence.	Number of convictions.	Amount of fines imposed.	Number dismissed or found "not Proven."	Number deserted simpliciter.
1	Milk—Deficient in milk fat	1	—	Admonished	—
18	Milk—Deficient in solids other than fat ... ..	12	£55	—	6
9	Sausages—Contained an excess of preservative ... ..	9	£25	—	—
5	Mince—Contained preservatives during prescribed period ... ..	5	£14	—	—
2	Whisky—Contained an excess of water ... ..	2	£5	—	—
2	Rum—Contained an excess of water ... ..	2	£12	—	—
1	Gin—Contained an excess of water ... ..	1	£10	—	—
1	Gelatine—Contained an excess of zinc ... ..	1	£3	—	—
—	—	—	—	—	—
39	—	33	£124	—	6

## THE FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Table showing Nature and Number of Total Samples Procured and Examined during 1945.

Nature of Sample.	Informal.		Statutory.	
	No. Taken.	No. Non-genuine.	No. Taken.	No. Non-genuine.
Aerated waters	3	—	—	—
Alum ground	—	—	1	—
Apples, dried	2	—	1	—
Apricots, dried	—	—	5	—
Arrowroot	1	—	—	—
Aspirin	3	—	—	—
Baking powders	21	—	19	—
Barley	5	—	4	—
Beef and vegetable extracts	5	—	—	—
Beetroot	1	—	—	—
Bicarbonate of soda	7	—	8	—
Bismuth lozenges (compound)	7	—	—	—
Black pudding	—	—	1	—
Boracic acid	6	—	6	—
Borax	6	—	5	—
Brose meal	1	—	—	—
Butter	2	—	23	—
Cascara sagrada	10	1	1	1
Celery salt	3	—	—	—
Cheese	1	—	6	—
Cinnamon	14	—	12	—
Cloves	5	—	—	—
Cocoa	12	—	9	—
Coffee and coffee essence	13	—	15	—
Coffee with chicory	7	—	—	—
Cooking fat	—	—	2	—
Cornflour	—	—	1	—
Cream of magnesia	1	—	—	—
Cream of tartar	14	—	19	—
Currants	4	—	8	—
Curry powder	3	—	1	—
Custard powder	1	—	—	—
Dates	2	—	2	—
Dessert mould	4	—	—	—
Drug, compounded	—	—	1	1
Egg, dried	1	—	—	—
Essence of rennet	2	—	—	—
Figs	1	—	6	—
Fig syrup	1	—	—	—
Fish, canned	1	—	—	—
Fish dressing	7	—	2	—
Fish paste	8	—	—	—
Fish roes	1	—	—	—
Flake meal	—	—	1	—
Flavourings	5	—	—	—
Flour, self rising and ordinary	27	—	17	—
Flowers of sulphur	3	—	2	—
Gelatine	10	1	2	1
Gin	—	—	1	1
Ginger, ground and preserved	14	—	10	—
Ginger ale	1	—	—	—
Glycerine	3	—	3	—
Glycerine of borax	1	—	—	—
Glycerine of thymol	2	—	—	—
Gravies and gravy powders	9	—	2	—
Gravy salt	1	—	—	—
Gregory's powder	4	—	7	—
Groats	1	—	—	—

Nature of Sample.	Informal.		Statutory.	
	No. Taken.	No. Non-genuine.	No. Taken.	No. Non-genuine.
Ice-cream powder	1	—	—	—
Icing sugar	1	—	1	—
Iodine paint	—	—	1	—
Lard	4	—	23	—
Lard, compound	—	—	1	—
Linseed meal	—	—	1	—
Liquid paraffin	4	—	—	—
Macaroni	5	—	3	—
Margarine	5	—	37	—
Meat paste	6	—	—	—
Meat, potted	1	—	1	—
Milk, sweet	1,641	27	718	29
Mince	5	4	29	8
Mincemeat	2	—	—	—
Mint, dried	1	—	—	—
Mustard	3	—	1	—
Mustard, compound	6	—	4	—
Nutmegs	4	—	—	—
Oatmeal	8	—	3	—
Oil, camphorated	1	—	7	—
Oil, castor	6	—	—	—
Oil, cod liver	—	—	1	—
Oil, edible	1	—	—	—
Oil, eucalyptus	1	—	—	—
Ointments, medicinal	37	4	1	—
Parsley, rubbed	1	—	—	—
Peaches, dried	3	—	8	—
Pea flour	1	—	—	—
Pease meal	3	—	4	—
Peppers	16	—	18	—
Peppercorns	1	—	1	—
Petroleum jelly	4	—	—	—
Piccalilli	1	—	—	—
Plantains, dried	1	—	—	—
Porage oats	1	—	—	—
Powders, medicinal	1	—	1	—
Prunes	—	—	3	—
Pudding mixture	3	—	2	—
Raisins	3	—	2	—
Raspberry pudding	—	—	1	—
Rice	—	—	2	—
Rum	—	—	2	—
Rusks	1	—	—	—
Sage	1	—	—	—
Sage and onion stuffing	1	—	—	—
Salad dressing	2	—	—	—
Salts, medicinal	7	1	14	—
Sauces	25	—	—	—
Sausage meat	1	—	—	—
Sausages	17	—	112	9
Semolina	16	—	9	—
Soups and soup powders	16	—	—	—
Soya flour	6	—	1	—
Spaghetti	1	—	1	—
Spice	12	—	2	—
Stuffing	—	—	1	—
Suet	4	—	—	—
Sultanas	3	—	6	—
Sweetening tablets	1	—	—	—
Tincture of iodine	8	4	6	—
Vegetables, canned	1	—	—	—
Vinegar	4	—	6	—
Whisky	2	2	4	2
Wine essence	4	—	—	—
Yorkshire pudding	1	—	—	—
	<u>2,183</u>	<u>44</u>	<u>1,241</u>	<u>45</u>

## SPECIAL SANITARY OPERATIONS.

	1939	1940.	1941.	1942.	1943.	1944.	1945
I.— <i>Dairies</i> —							
Registered during Year ...	—	—	—	—	55	143	103
Removed from Register ...	—	—	—	—	79	227	110
On Register at 31st Dec. ...	1,728	1,682	1,616	1,582	1,558	1,474	1,467
No. of Inspections ...	19,370	21,484	19,789	17,586	17,529	15,829	15,719
Contraventions of Orders, Acts, or Bye-laws ...	39	74	16	19	22	55	54
Prosecutions for same ...	7	5	1	1	11	6	4
Repairs or improvements effected ...	29	60	33	44	28	83	91
II.— <i>Dealers in Ice-cream</i> —							
Registered during Year ...	—	—	—	—	2	—	94
Removed from Register ...	—	—	—	—	2	1	118
On Register at 31st Dec. ...	502	480	456	452	452	451	427
No. of Inspections ...	6,342	6,576	5,566	4,421	1,951	1,144	3,103
Contraventions of Acts, Orders, or Bye-laws ...	10	9	4	1	—	—	5
Prosecutions for same ...	1	1	—	—	—	—	1
Repairs or improvements effected ...	7	6	2	1	—	—	18
III.— <i>Byres for Milch Cows</i> —							
No. of Dairy Byres as at at 31st December ...	69	71	71	70	69	64	64
No. of Cows licensed for ...	1,746	1,816	1,816	1,798	1,792	1,665	1,665
Average No. kept ...	1,626	1,607	1,590	1,574	1,565	1,576	1,571
No. of Inspections ...	502	514	519	444	473	538	425
IV.— <i>Unwholesome Food</i> —							
No. of Inspections ...	10,587	11,926	11,726	11,564	12,053	10,468	10,026
No. of Lots dealt with ...	92	102	391	1,845	2,001	2,075	2,308
Nature of Food destroyed at Inspector's instance with Owner's consent—							
Assorted foodstuffs ...	29 tons 14 cwts. 107 lbs.	33 tons 14 cwts. 19 lbs.	88 tons 15 lbs.	114 tons 14 cwts.	99 tons 6 cwts. 41 lbs.	180 tons 17 cwts.	221 tons 6 cwts.
V.— <i>Food and Drugs (Adulteration) Act</i> —							
Informal samples analysed	3,219	3,270	2,860	2,165	2,079	2,098	2,183
Statutory samples analysed	1,249	1,310	1,295	1,156	1,284	1,251	1,241
Statutory samples found non-genuine ...	70	63	58	61	41	36	45
Proceedings instituted ...	56	52	44	52	31	28	39
No. of convictions ...	54	48	33	40	31	25	33
Amount of fines imposed ...	£123 11s.	£134	£94 15s.	£106 8s.	£110	£103	£124
No. dismissed or found "Not proven" ...	1	1	6	7	—	—	—
No. deserted <i>simpliciter</i> ...	1	3	2	5	—	2	6
Warranty Defence sustained	—	—	3	—	—	1	—
No. pending ...	—	—	—	—	—	—	—
No. withdrawn and expenses paid ...	—	—	—	—	—	—	—
Amount of expenses paid ...	—	—	—	—	—	—	—

## SECTION IX.

## AIR PURIFICATION AND SMOKE ABATEMENT.

The attitude of the public generally during the "active" war years towards atmospheric pollution caused by smoke emission underwent a change from the normal pre-war age. Attention was occupied by more immediately pressing matters and distractions and, as was to be expected, interest in the subject waned. A primary contributing factor to this attitude was doubtless the fact that during the early war years the effort of authorities, both central and local, was to create more smoke instead of less. The anti-smoke complex which obtained pre-war was thus largely lost and apart from those individuals who suffered from local smoke nuisances the subject of smoke abatement was simply a back number. Thus it is that apart from the resumption of active administrative work the educational aspect as regards the public generally and those interested in fuel consumption and plant operation in particular will have to loom very large in the fresh campaign being undertaken by the authorities and societies towards smoke abatement and air purification.

There is, however, evidence that an anti-smoke interest is again beginning to develop and that the community generally is not just so complacent with regard to atmospheric "sewage." This stirring of the attitude is reflected in the increasing number of complaints that are being dealt with week by week. In more normal times this was an important aspect of administrative work and considerable effort was expended in abating individual nuisances as they were reported. It is evident that less complacency is being shown in the toleration of annoyance caused the the excessive emission of smoke, grit and fumes.

Up to the end of 1945, apart from dealing with local nuisances, the staff conditions did not permit of more intensive work being undertaken, as, in addition to the continuance of attention to smoke abatement work, the staff had other technical duties to perform, mostly concerning the arrangement of departmental fuel supplies which are extensive. The first few months of 1946, however, saw the return of three of the inspectors from service as Engineer Officers in the Navy and this has enabled a beginning to be made with routine observation and inspection



work in the various districts of the city. The increase in active administrative work is shown by the fact that since the middle of February over 250 individual firms have been visited as the result of exception being taken to the nature and volume of smoke emitting from their respective chimneys. In addition to dealing with the almost daily receipt of complaints which require special attention, initial and follow on observations and instructions are involved.

The position in the fuel field cannot be said to have improved recently. There is a shortage of all types and grades, and less essential users are still badly affected. Thus it is that practically 50 per cent. of fuel users are consuming varieties which are most unsuitable for their particular plants. In some cases the "material" is almost unburnable and its continued use leads to endless exasperation and actual carelessness on the part of the operatives. In consequence, much of the heavy smoke emitted is due to this cause. Another factor to be noted in this connection is that the original plant operatives at the beginning of the war period have undergone many changes. New and inexperienced men have been recruited and it is going to take some time before these men are reasonably educated in the practical and technical requirements of their work. Much smoke is due to irresponsible stoking methods being used.

During and up to the end of the war, it is now being disclosed, a surprising number of additions and renewals to boilers and furnaces were effected. These were all in connection with essential work to overcome increased and continuous load conditions. It is also being disclosed that very many plants are in need of overhaul and replacement and this is likely to be a slow matter for some time yet. In addition, many flues and chimneys are requiring repair, rearrangement and heightening so as to improve combustion conditions. This, again, will take time. The continued use of "small" for fuel is leading to many grit nuisances being caused—a difficult type of complaint to deal with. A number of notable instances of this involving large plants are being dealt with and until it is possible to have new grit arrestors installed and additions made to existing ones such nuisances will continue. A considerable amount of such plant is now under construction.

The statutory enforcement of the existing Smoke Regulations has not been attempted since the beginning of the war. It might be stated again that this action was only resorted to by the Department when all other efforts had failed and only when it was clear that repeated warnings were being ignored and no sincere effort was being made to comply with the Regulations. The amicable and technical solution of a nuisance, either general or local, has always been the desideratum. It may be that in the immediate future such statutory action may again have to be resorted to. Successful air purification work necessitates the active collaboration of every interest concerned. Really successful results cannot be obtained otherwise.

#### SOOT AND ATMOSPHERIC PRECIPITATION GAUGES.

Five precipitation gauge stations which, on analysis, give monthly records of basic dust and artificially produced soot and ash are situated in the northern, southern, eastern, western and central districts of the city. These observations and records have been maintained since 1914. Until a few years before the war nine stations were maintained, the number later being reduced to the above five points. In addition, two control stations at varying points outwith the city have been maintained. During the war the locus used was the Loch Katrine area from which valuable information was obtained. In April, 1946, these two stations were replaced by one at Mugdock Estate, north of the city and another on the fringe of the moorland at Eaglesham, south of the city. The following is an abstract from the results which in normal years are published in detail :—

#### DEPOSIT OF EACH ELEMENT OF ATMOSPHERIC POLLUTION FOR 1944-1945.

	Tons per Square Mile.	
	1944.	1945.
Insoluble Matter—		
Tar ... ..	3.30	3.27
Carbonaceous other than Tar ... ..	48.38	47.46
Ash ... ..	102.22	106.42
Total Insoluble Matter ... ..	153.90	157.15
Total Soluble Matter ... ..	111.17	92.09
Total Solids ... ..	265.07	249.24
Rainfall in Millimetres ... ..	951.07	982.25

The report for 1944 indicated that the average weight in tons per square mile of solid deposit was 0.278 per millimetre of rainfall. For the present year (1945) this figure amounts to 0.254, a reduction of 0.024 compared with 1944. The total precipitation during 1945 was .1 per cent. less than for the previous six-year period, 1939-1944. The

average annual precipitation for the six-year period 1939-1944 was 249.51 compared with 249.24 for 1945 as shown in the above table. The average monthly rainfall for the year during the winter period, October-March, was 79.98 millimetres, while the average monthly deposit for that period amounted to 23.26 tons per square mile. The corresponding figure for the summer period of the year, April-September, was 83.73 millimetres and there was an average monthly deposit of 18.28 tons per square mile. The total rainfall as shown by the gauges during 1944 was 951.07 millimetres, the figure for the present year being 982.25 millimetres. As will be seen, the corresponding total precipitations are 265.07 and 249.24 respectively. This shows an increase in rainfall and a drop in precipitation for 1945.

#### CLASS IN BOILER HOUSE PRACTICE AND FUEL ECONOMY.

During the past winter the usual course of technical study in boiler-house practice for stokers, boiler attendants, engineers, etc., held under the auspices of the Scottish Branch of the National Smoke Abatement Society and the Corporation of Glasgow, was carried on and again the Scottish Regional Fuel Efficiency and Economy Committee of the Ministry of Fuel and Power have collaborated in the work. A combined ordinary and advanced class commenced on 30th October, 1945, and finished on 21st January, 1946, meeting on one evening weekly. This was the 30th annual winter session. The total enrolment was 60. Of this number, 34 were in the ordinary class and 26 in the advanced class. The average attendance over the session was 65.5 per cent. in the ordinary class and 89 per cent. in the advanced group. Twenty-four men came forward to the class examination at the end of the session. The examination in each grade is a written one. Nine men took the ordinary grade and 6 gained passes and merit certificates. Fifteen took the advanced paper and there were 15 passes and merit certificates. Three book prizes were awarded in each grade to the first 3 eligible candidates, i.e., *bona fide* stokers. In addition, a book prize was given by Bailie Munro, President of the Branch, to the next eligible candidate, not already a prizewinner, who was in the employment of a Corporation Department. A total of 13 lectures was given and in addition, two further refresher lectures were given at the end of the session to the 20 candidates who intimated that they were going forward this year to the examinations of the City and Guilds of London Institute in Boiler House Practice and Combustion Engineering. The record of this class in these examinations since their inception in 1936 has been high. Last year a member of the class gained the silver medal in Boiler House Practice as a result of the examination.

## SECTION X.

## GENERAL SANITARY OPERATIONS.

Prior to the war when this Annual Report was published in greater detail, it was customary to include a statement in the Appendix giving details of the work done by the sanitary inspectors. For reason of economy, shortage of staff because of conscription of men for the services, and the acute shortage of paper, the Annual Reports of the Department were considerably abridged, and in that respect the reports by the Divisional Sanitary Inspectors were combined in one summary, and the tabular statement referred to was omitted.

The table now published contains the statistics of the actions taken under the various Acts which place statutory duties on the Local Authority in respect of nuisances, etc. These duties include the routine visitation of the districts in dealing with complaints and the discovery and removal of nuisances. The total of these, as shown in the summary which introduces the Appendix Table No. XXIII, varied between 593,997 in 1944 and 714,036 in 1939, when the normal work of the Department was carried out until the beginning of September, when World War Number Two began. In pre-war years the number of such visits annually was usually more than 850,000.

The chief reason for the reduction in numbers was the reduction in staff consequent on mobilisation. The value of preventive health measures and sanitary services had been demonstrated in previous wars and soon after hostilities broke out the Government called for volunteers for the sanitary services. The younger inspectors were allowed to volunteer and the staff was considerably reduced because it was not possible to replace all of them by qualified personnel. The reduction in the activity of the inspectorial staff as the war progressed towards a climax in 1944, is shown by a comparison of the details which follow the introductory summary.

Operations for dealing with nuisances could not be neglected and the number of nuisances so dealt with reached a low level in 1942, when the total was 53,478, but as soon as the war ended and manpower and materials became available, matters which had not received the usual attention were dealt with and the total number increased in 1945 to 66,879. This increase is attributed to a larger number of

instances of dampness in dwellings which were taken up, 8,699 in 1945, for a considerable number of this serious complaint could not be properly dealt with for lack of materials and labour, during the war, and this occurred mostly in tenements which are regarded as unfit and are becoming more or less derelict. Nuisances associated with drains, soil pipes, etc., which numbered only 20,861 in 1939, increased to 31,262 at the end of the war. It has to be recorded that malicious damage accounted for a discouraging proportion of the latter figures. Dirty houses and bedding which numbered only 429 in 1940, became 1,581 in 1945 because of the greater attention paid to this aspect of sanitation, for cleaning materials had become scarce during the war.

Hygienic conditions were not improved by the increase in overcrowding which resulted from the influx of munition workers, the destruction of houses during air raids, etc. The number of overcrowded houses recorded in 1940 was 1,255 compared with about 500 in the years prior to the war. The figures quoted have little real relationship to the extent of overcrowding in the city for they merely represent the number of visits in connection with houses de-crowded by transfer of tenants to Corporation property. Increased overcrowding became evident again towards the end of the war when the cumulative effect of six years cessation of building operations intensified by the demolition of quite a number of dangerous buildings created an acute housing shortage.

The bombing of the ports in England resulted in a diversion to the Clyde of much marine traffic from America. Many Distressed British Seamen were brought to Glasgow. This is reflected in the increase in the number of Seamen's Boarding Houses from 2 in 1939 to 9 in the later years of the war. The numbers of "houses let in lodgings" and "farmed-out" houses were reduced as some relaxation in the standard became inevitable because of the difficulty of obtaining housing accommodation. There was a large increase in the so-called "furnished flats," many of which would in former times have been included in the categories mentioned, although quite a number of these were of a superior type, indicative of the increased use now being made of them by people of the middle class.

Because of the suspension of fairs throughout the countryside, permission was granted to showmen occupying caravans to remain on their sites during the war, outwith the statutory period of six months.

With the coming into force of the new Factories Act, 1937, and the Sanitary Accommodation Regulations, 1938, the duties of the local authority were enlarged in connection with the sanitary and hygienic conditions of both mechanical and non-mechanical factories. Operations taken under the section in the first part of that Act are dealt with under headings 8-12. The numbers of inspections of nuisances, etc., are all lower than usual because of the difficult conditions existing during the war and the reduced staff. Similar observations apply to actions taken with regard to shops and offices. Fish fryers and restaurants have now been shown separately because of the frequency with which complaints are made regarding nuisances caused by fumes from the boiling fat ; frequent inspection is necessary in order to ensure that the premises are kept in a clean condition.

The number of piggeries increased from 59 to 72 in 1943 because of the importance of food production and has now fallen to 66. The offensive trades were reduced from 70 to 56 because of the difficulty of obtaining materials.

Measures which required to be taken for the protection of the population against air attack increased considerably the duties of local authorities, especially in large towns, and in this connection the staff of the Department had to deal with the evacuation of children, nursing mothers and invalids evacuated from the city, and with the air raid shelters which were hurriedly erected to protect those who remained. The shelters were at first left open for ready access, but because of the frequency of nuisances occurring in them, sparred doors had to be fitted and locked until the air raid warning was given. Here also gross malicious damage to structural and internal fittings had to be contended with. Services were also in demand in connection with shelters constructed in the basements of large premises, especially those in the centre of the city. The total number of inspections of air raid shelters reached 27,175 in 1941. Military billets also required to be supervised, and inspections in the first year of the war numbered 502.

The hurried evacuation of children to country districts when the Germans started indiscriminate bombing early in the war, brought to notice the verminous condition of many families, a condition which may have been exacerbated by the crowding together in air raid shelters. Special attention had to be directed to the matter, and much additional

work was involved in the inspections of children attending school. The number of children found infested increased from 3,924 in 1939 to 17,202 the following year, and reached 21,425 in 1941. The action taken to remedy this condition is indicated in Table XVII of the Appendix, which shows that the number of children cleansed by guardians was 1,945 in 1940, a figure which was increased to 11,266 in the following year and has been more or less maintained at that level. Additional powers have now been obtained in the Education (Scotland) Act of 1945. Homes of verminous children inspected numbered 3,584 in 1939 and reached a maximum of 10,194 in 1943, even with the reduced staff.

*Offensive Trades.*—Reference has already been made to offensive trades, and in pre-war reports a statement was included showing the classification of these and the alterations from year to year. The following statement shows the changes which have taken place since 1939. Under the Government Scheme, quite a number of pre-war businesses were closed down and the work concentrated on other premises in order to release man-power, etc. Most of the offensive trades are situated in the east-end of the city, and the number in operation at the end of 1945 in that district was 26 compared with 43 in 1939.

#### OFFENSIVE TRADES.

	In Operation 1939	Closed under Government Concentration Scheme	On Register 1945
Bone Boiler ... ..	7	†4	4
Gut Cleaner ... ..	4	—	4
Glue and Sizemaker ... ..	1	—	1
Hide and Skin Factor ... ..	9	4	5
Manure Manufacturer ... ..	5	4	1
Soap Boiler ... ..	6	3	3
Tallow Melter ... ..	16	*9	7
Tanner ... ..	10	3	7
Blood Boiler ... ..	1	—	1
Horse Slaughterer ... ..	} 1	—	{ 1
Knacker ... ..			
	60	27	34

† One added in 1942.

\* One lapsed 1939-40.

## DISINFECTION.

The following tables summarise the washings and disinfections carried out at Ruchill and Belvidere Disinfecting Stations during the year 1945.

	Belvidere	Ruchill	Total
Number of washings ... ..	10,399	11,357	21,756
Average number per day ... ..	34.7	31.01	63.10
Articles washed and disinfected ...	315,740	426,566	742,306
Average number of articles per washing	30.3	37.5	34.1
Fuel consumed (tons) ... ..	596	570	1,166
Fuel used per article (lbs.) ... ..	4.27	3.0	3.51
Soap and powder used per article (ozs.)	0.27	0.29	0.29
Disinfectant .. ..	0.71	0.56	0.63

*Number of Washings, Articles Disinfected, etc.,  
for Years 1938-45 Inclusive.*

	Washings	Articles	Houses, etc., Disinfected	White- washings	Library and School Books Disinfected
1938 ...	19,088	665,641	12,457	2	1,602
1939 ...	18,189	681,074	10,419	—	1,550
1940 ...	26,780	841,572	12,427	14	1,346
1941 ...	25,106	903,562	10,494	4	1,319
1942 ...	27,095	104,945	11,101	1	1,956
1943 ...	24,981	894,119	11,207	1	2,004
1944 ...	23,513	803,748	11,056	1	1,763
1945 ...	21,756	742,306	10,840	—	1,498

With the declaration of peace during 1945 hopes were entertained that the measure of restriction imposed by war conditions on normal sanitary activities in the city would come to a speedy end. Circumstances have not, however, justified that optimistic outlook. On the contrary it is apparent that the urgent demand on available labour and material for the building of new houses for the homeless must for a very considerable time to come restrict the maintenance of existing dwellings. This important part of the sanitary inspector's duties will therefore continue to call for the exercise of more than ordinary assiduity.

*General Nuisances.* It is the duty of every local authority in terms of Section 17 of the Public Health (Scotland) Act, 1897, to inspect their district for the purpose of the detection and removal of nuisances "so as to secure the proper sanitary condition of their district." In fulfilment of this duty, 573,215 visits of inspection were made and 64,405 nuisances abated. These figures are considerably higher than those for the previous year.



Choked drains represented more than one half of all the nuisances recorded. Attention may be directed in this connection to the multiplicity of traps on house drainage and the need for revision of the bye-laws regulating this matter.

Nuisance of a type unusual in the city occurred in the Govanhill district where complaints by residents of smells and fumes led to the discovery in the area of a burning tip, used by a local iron-works for the disposal of slag and ashes from their blast furnaces. Efforts to isolate the fire by trenching were unsuccessful and, with flooding impracticable, it was ultimately decided in consultation with Dr. Bires of the Department of Health for Scotland, who is an authority on burning colliery spoilbanks, to allow the material to burn out. Meantime "blinding" of the burning mass was carried out daily in an effort to reduce smoke and fumes to a minimum. Pipes were sunk into the unaffected part of the tip nearest the fire and temperature readings of the interior thus obtained gave indications of the progress of the fire. It transpired that the fire originated from the lighting of bonfires at the base of the tip during V.E. Celebrations.

Proceedings against a firm of house factors for failure to remove or abate nuisance in terms of the Public Health (Scotland) Act, 1897, particularly Section 16 thereof, were unsuccessful and the local authority were found liable to the defenders in expenses. The nuisance was specified as pollution of three dwelling-houses situated in a tenement in the Eastern Division of the City by smoke from said houses. The Sheriff-Substitute's findings were as follows :

" The Copy Notice bears to be served on the defenders as owners, and in my opinion it is inept. Section 20 (1) requires service " on the author of the nuisance or if such author cannot be found on the occupier or owner of the premises." The plain meaning of this appears to me to be that the primary responsibility lies with the author of the nuisance and that it is on him the notice should be served. It is only if the author cannot be found that service is to be on the owner. But here the pursuer, on his own showing, knows the authors of the nuisance. He avers that the defenders are. Accordingly there was no statutory justification for service on the defenders as owners.

“ This view may seem hyper-critical because in this case it happens that the defenders are alleged to be both authors and owners. I do not see how this accident can affect a question of statutory construction, but, in any event, the point is here one of importance because it is a highly debatable question whether the defenders are either authors or owners. The defenders might well have ignored the notice on the ground that they were not owners. It would seem an extraordinary result if that contention were upheld and they were nevertheless found liable as authors of the nuisance.”

Mention was made in the previous year's report of the prevalence of malicious damage to property in the city. The Victory Celebrations brought an increased outburst of this form of irresponsibility and there were many instances demanding the attention of the sanitary inspector. Doors were wrenched off water-closet compartments, empty shops and houses were stripped of woodwork of all kinds, including floors, doors and window frames, exposing the premises to pollution, and baffle walls at the entrances and exits of common closes were broken down causing damage to drains. Property owners were, quite naturally, resentful but it is satisfactory to record that the requirements of the Department were met in all such cases as gave rise to nuisance.

*Piggeries.*—There are 67 premises in the city licensed for the keeping of swine. The greater number of these is situated in the landward areas, where, in the absence of sewerage facilities, drainage is by way of septic tanks to the nearest burn or watercourse. It can be readily appreciated that under these conditions strict supervision is necessary. Visits of inspection numbered 299 and 26 nuisances were dealt with. In one case application for renewal of licence was refused to a pig keeper who had failed to maintain the drainage of his premises in a satisfactory state.

*Dietetic Water Storage Cisterns.*—Because of their situation on high ground many tenement properties cannot be provided with an adequate supply of water direct from the street mains. It is therefore necessary in such cases to have cisterns in the attics for the storing of supplies overnight, when consumption is low and pressure in the mains at a maximum. There are in all 5,121 cisterns in property of this kind in the city. These are regularly inspected to ensure a proper standard of maintenance. Over the period under review, 3,321 inspections were made and 1,396 cisterns were cleansed and/or repaired.

*Common Lodging-houses.*—The number of such houses on the register at the end of the year was 35, providing accommodation for 8,818 persons. These totals are inclusive of boarding-houses for seamen. Visits of inspection totalled 1,016 and 63 contraventions of the bye-laws were dealt with. All were of a minor nature.

One common lodging-house and a seamen's boarding-house were removed from the register ; the former was purchased by the Education Authority for use as a store and the latter acquired by the Royal Navy. Two seamen's boarding-houses were added to the register being Civil Defence premises acquired by the Ministry of War Transport for accommodating prisoners of war awaiting repatriation.

*Sub-Letting of Houses.*—This type of housing will presumably endure until the housing shortage is a thing of the past but it can be said that the Rent of Furnished Houses Control (Scotland) Act, 1943, and the work of the Rent Tribunals set up thereunder have definitely checked any expansion of this form of letting. Constant and close supervision of these sub-let houses is necessary to maintain even a minimum standard of hygiene. The fact must be faced that if and when the sub-tenants of many of these apartments are rehoused they will require very stringent supervision for a considerable time.

*Cemeteries.*—The various cemeteries throughout the city are kept under supervision to secure compliance with the bye-laws. Twenty-seven visits of inspection were made ; five applications for permission to inter in burial grounds now under restriction were made ; four were granted and one refused.

In one cemetery in the southern part of the city a great deal of vandalism took place during the year. Gravestones and headstones were displaced and broken, monuments defaced and trees and shrubs broken or uprooted. The company owning this cemetery is in liquidation and there is no caretaker or other person in charge. This gives the vandals their opportunity.

*Verminous Children.*—School inspection of children was carried out normally during the year with little change in the incidence of verminous conditions found. One thousand, three hundred and seventy-eight visits were made to schools and 91,750 children inspected. Of

these 19,355 (21·0 per cent.) were found to be "infested" or "infected" as compared with 18,025 (20·2 per cent.) in 1944. Children found infested with fleas numbered 351 and those in a dirty condition 1,514. Written notices were served in 932 cases. Eleven thousand, two hundred and eighty-five children were cleaned by parents and 98 by the local authority.

This work has been carried out up to the present under powers conferred by the Glasgow Police Order Confirmation Act, 1904, but in future Section 39 of the Education Act, 1945, will be the legal instrument. This gives somewhat wider powers and contains a penalty clause which the Act of 1904 lacked.

*Air-Raid Shelters.*—Too many of these undesired relics of the immediate past still adorn our streets, courts and open spaces. It is acknowledged that their removal cannot be undertaken overnight and that progress is being made, however slowly, but in the meantime many of them are little more than public conveniences or unofficial refuse depositories. In some cases too, they have been found affording harbourage for rats. Inspections of shelters totalled 665 and 57 nuisances or other conditions were dealt with.

*Housing.*—Each year a considerable volume of work in connection with the administration of the Housing Acts falls to be dealt with. During the war years the operation of the Acts as regards Closing or Demolition Orders was largely suspended. The work of measuring houses for the purpose of the overcrowding provisions of the 1935 Act was, however, maintained. During the past two years housing inspections and surveys have again assumed considerable dimensions in preparation for probable post-war developments. This work has very largely taken the form of surveying and classifying the housing accommodation throughout the city in order to have a clear and complete picture of the position.

The details for the year are as follows :—

Inspection of District Regulations, 1928	...	...	...	11,769	visits
Demolition or Closing Orders (1930 Act)	...	...	...	329	„
Overcrowding—Measurements (1935 Act)	...	...	...	1,078	„
Overcrowding—Other visits	...	...	...	885	„
Repairs	...	...	...	457	„

*Offensive Trades.*—The number of offensive trades on the register is 56 but as a result of the Government's "Concentration of Works" Scheme only 30 of these are operating. The majority of the trades are in the eastern area of the city.

Satisfactory treatment of effluvia arising from certain of the processes carried on has always been a major consideration. Chlorine is the agent mostly used in this connection.

Fly infestation during the summer months has proved troublesome and several methods of controlling this nuisance have been tried out with varying degrees of success. The new insecticide D.D.T. may prove an effective answer. It was used as a spray in a number of premises towards the end of the year but because of the seasonal decrease in flies the tests could not be regarded as conclusive. Owners of the trades are alive to the necessity of continuous action in this respect.

Few of the premises are free from rats. Indeed many would suffer from gross infestation but for the constant action taken against the vermin. Rat proofing, so far as this has been practicable, has been carried out with gratifying results.

The introduction of gut scraping and tripe cleaning machinery has marked a definite advancement in this trade if only on account of the expedition with which the raw material can now be dealt with. The delivery in a fresh state of the raw material to the trades has been the subject of discussion between representatives of the trades and the Ministry of Transport. Sanitary supervision of the businesses entailed 776 visits and it is satisfactory to record that only 17 nuisances of a minor nature were discovered.

*Brokers.*—Seventy-two applications for brokers' licences were received, of which one was refused on account of the premises concerned being situated in a tenement of dwelling-houses. Visits of inspection numbered 119 and 19 nuisances consisting of dirty walls, choked drains and defective roofs were dealt with.

*Cleansing of Common Stairs, Passages, etc.*—This branch of the work still continues to call for much time and attention on the part of the officers. Throughout the year 45,016 visits were made for this purpose,

12,046 notices were issued to house-holders fixing the dates when their turn of cleansing became due, and in 7,093 instances verbal warnings were given to offenders. Proceedings were instituted in 36 cases and as a result fines amounting to £20 13s. were imposed.

The daily service by the Cleansing Department to shops situated in the main thoroughfares of the city has created difficulties in fixing responsibility for the cleansing of the common closes leading to the back courts in tenements where the ground floor consists of shops and the upper floors of dwelling-houses. Many of these shops have internal sanitary conveniences, have no windows other than those to the front and are heated by means of electricity so that the occupiers have no occasion to use the close. It is, of course, essential to prove in such circumstances that the shop tenants "use" the close and it has been found when enquiries were made of various proprietors, that information on this point was not available. In cases of this kind the Department is left with no alternative but to make arrangements with the house tenants to undertake the necessary cleansing in rotation.

*Factories.*—The register showed at the end of the year that there were 5,796 factories (4,002 mechanical and 1,794 non-mechanical) in the city. Visits of inspection numbered 10,155 in the course of which the attention of occupiers was directed in 1,343 instances to the fact that their premises were not in conformity with the provisions of the Factories Act, 1937, or of the Regulations made thereunder. Generally speaking, these breaches were all more or less of the nature normally found in premises of this kind and nothing of an outstanding character was noted. As stated in last year's report every opportunity is taken to improve the standard of the sanitary conveniences and during the year modern fittings were introduced into a number of establishments.

*Bakehouses.*—Premises coming under this category are controlled by the Factories Act, 1937. There are 257 bakehouses in which mechanical power is employed and 190 without such power. Visits of inspection totalled 1,681 and on 216 occasions the attention of the occupiers was drawn to irregularities such as dirty walls and floors, insufficient lighting and ventilation and sanitary conveniences out of repair. No delay was experienced in having these defects rectified.

Five basement bakehouses are still occupied where the Corporation are not satisfied that they are suitable for use as regards construction, height, light and ventilation and the certificates of suitability issued in terms of the Factory and Workshop Act, 1901, were withdrawn on 30th June, 1939. On account of the National Emergency arising shortly after this date the Committee on Health extended the Certificates for twelve months and this was done from year to year throughout the war period. The occupiers have now, however, been informed that no further extensions will be granted beyond November of this year. One firm lodged an appeal against the closing of their premises when the original decision to withdraw their certificate was made and as this particular bakehouse is still in use the probability is that the matter will come before the Court at an early date.

*Home Workers.*—Since 1939 the returns received under this heading have shown a gradual decrease until at present there are only 35 persons engaged in this class of work compared with a pre-war total of 184. Altogether 48 visits were paid to the homes of these workers and nothing was found to which exception could be taken.

*Shops.*—Visits recorded under the provisions of the Shops Act, 1934, number 1,863 and resulted in 251 defects or nuisances being found. These consisted of inadequate lighting and ventilation, failure to maintain a reasonable temperature, dirty floors, walls and ceilings, defective sanitary fittings, general disrepair, rat infestations and one shop not being provided with suitable and sufficient sanitary accommodation for the use of the persons employed therein. All of these, with the exception of the latter case, which is still pending, were satisfactorily disposed of before the end of the year.

*Offices.*—The only considerable body of workers not specifically covered by existing health legislation are those engaged in offices. A Bill dealing with offices was drafted in 1926 but it never reached the Statute Book. Offices are, of course, "premises" within the meaning of the Public Health (Scotland) Act, 1897, and action can be taken under that Act although the proceedings are somewhat eumbrous.

During the year 152 visits were made to office premises and eight intimations of nuisances under the above Act were served. Seven of these nuisances concerned choked conveniences which were promptly attended to and the other case, which referred to lack of ventilation, was being met at the end of the year by the introduction of a complete system of mechanical ventilation.

*Drainage.*—Building activities did not show any marked increase over that of the previous year. The drainage and plumber work of 515 new houses and of 20 old properties, involving over 200 houses, were examined and tested. This work, including the installation of new fittings in factory premises and other alterations following Dean of Guild Court linings, necessitated 9,787 visits being made and the application of 625 tests.

Of the new houses erected 203 were of a temporary character and these were responsible for the introduction of several features contrary to established plumbing practice in Scotland.

*Rent Restrictions Acts, 1920-1939.*—Applications were received from 438 tenants for certificates to the effect that their dwelling-houses were not in a reasonable state of repair, of which 390 were granted, 26 refused, and 22 withdrawn. Fifty-six applications were received from owners for reports and all of these were granted. These figures are greatly in excess of those for previous years.

On investigation, many of the applications for certificates are found to arise from a false conception of the purpose of the certificate or as the result of bad advice. Many tenants appear to think that possession of a certificate will advance their claim for a Corporation house; others seek to use the Acts as a means of expediting repairs which could quite adequately be dealt with under the Public Health Acts. The prompting of the self-appointed housing "experts" and agitators are too often acted upon.

*Tents, Vans, Sheds or similar structures used for Human Habitation.*  
—The necessity for everyone being either engaged on work of national importance or connected with the Services in one way or another together with the "black-out" conditions imposed during the war years prevented many showmen from following their usual occupation but with the removal of these restrictions and the return to "Civvy Street" of the younger men it can be expected that there will soon be an early resumption of their former mode of life. Apart from the "Fairs" held in the city during the holiday periods, living vans were located on twelve different sites on which sanitary conveniences, water supply and refuse receptacles are provided. All of these occupiers had the special sanction of the Corporation to prolong their stay beyond the period of six months stipulated in the bye-laws.



The number of inspections made was 496 and apart from a choked drain and a defective water-closet, which were speedily attended to, no grounds were discovered for any action by this Department.

*Housing (Agricultural Population) (Scotland) Act, 1938.*—Twelve inspections were made of premises under this heading and no breaches of the bye-laws framed by the Corporation in connection with bothies, chaumers, etc., were discovered.

*Rag Flock.*—Eleven samples of rag flock were procured during the year. Of these only four were found to be in conformity with the standard prescribed by the Rag Flock Regulations (Scotland), 1912. Action was pending at the end of the year in respect of the remaining seven samples.

Dissatisfaction has been expressed by the trades concerned regarding the restricted definition of the term "Rag Flock" and the low standard of cleanliness permitted by the Regulations. A Government Committee is at present deliberating on these matters.

*Farmed-Out Houses.*—The total number of farmed-out houses registered in the city is 268, all of which are situated in the central and eastern divisions. Visits numbered 2,359 and 26 nuisances were discovered, two of which concerned dirty bedding.

The number on the register represents a decrease of 100 on that for the previous year resulting from three tenements being declared dangerous and vacated. The Corporation rehoused the majority of the occupiers. One of the tenements has already been demolished and the other two await demolition. Many of the remaining farmed-out houses are situated in worn-out properties which, when the housing position becomes less acute, will be represented for demolition under the Housing Acts.

*Limewashing, etc., of Common Staircases and Passages.*—Five thousand, four hundred and thirty notices were issued to owners with reference to the dirty condition of walls and ceilings of tenements. In 3,221 cases the required cleansing was carried out. While conditions have improved they are not yet back to normal and there is still a

considerable lapse of time between the issue of the notices and the carrying out of the work. There is a greater need of cleansing since the removal of much of the "strutting" in closes. The owners cannot always be blamed for the delay as apart from shortage of labour this class of work is not attractive to skilled operatives.

*Sanitary Conveniences.*—The number of water-closets used in common is 30,666. Of these, 6,199 serve two tenants, 17,076 serve three tenants, 6,102 serve four tenants and 1,289 serve five or more tenants. The number of dry closets totals 187 and there are 47 privy middens serving dwelling-houses which are situated in outlying parts of the city where no sewerage facilities are available. The number of houses with fixed baths totals 129,635 which represents 45 per cent. of all houses in the city.

Houses without an inside water supply number 242. The majority of these houses are situated in worn-out properties where it would be unreasonable to insist on the introduction of an indoor supply.

*Rat Infestation.*—During the year, 12,405 visits of inspection were made to premises suspected of being rat infested and the total number of rats destroyed was 3,393. This number is no guide to the time spent on the work; the survey of large premises or the difficulty of gaining access to disused cellars or unoccupied shops, etc., may occupy several hours of the inspector's time.

In one institution which was heavily infested, trapping on a large scale destroyed 425 rats. There is no doubt that the presence of uncovered waste food bins in the grounds of the premises attracted vermin from the surrounding area.

Towards the end of the year an area adjoining the docks was minutely surveyed and trapping on an extensive scale is now in progress. While the total catch is not yet known the figures so far indicate that the black or ship rat will probably represent 30 per cent. of the whole.

The majority of these rats were caught in large marine engineering works which, constructed of steel and concrete, are proof against the burrowing habits of the brown rat. The vermin are attracted to these premises by the canteens.

There are always some minor corrections in the vital statistics because of transfers, changes of diagnosis, and other minor adjustments which cannot be given effect to for some time after the end of the year, but the following statistics for 1946 are comparable with the respective figures for the preceding year.

The deaths during 1946 numbered 14,457, which is equivalent to a death rate of 13.8 per thousand of the population. These figures compare with 13,847 deaths and a rate of 13.1 for the preceding year. The increase is largely due to the greater number of deaths from respiratory diseases referred to later. The death rates for the past five years have been as follows:-

1942 ...	14.0	1944 ...	13.9
1943 ...	14.0	1945 ...	13.1
1946 ...	13.8		

Particulars of the principal causes of death are given in the following table with a comparison for the previous two years:-

	Number of Deaths		Death Rate per Million	
	1944	1945	1944	1945
Enteric Fever .....	1	3	1	3
Measles .....	16	24	15	23
Scarlet Fever .....	6	5	6	5
Whooping Cough .....	36	35	34	33
Diphtheria .....	65	32	62	30
Cerebro-spinal Fever ..	28	28	27	29
Pulmonary Tuberculosis.	1,136	1,078	1,173	1,027
Influenza .....	79	46	75	44
Pneumonia .....	767	548	730	522
Other Respiratory Diseases .....	466	441	444	420
Diarrhoea and Enteritis (under 2 years) .....	698	396	665	377
			296	282

The principal features in the above statistics are:-

Infectious diseases - The low prevalence of the common infections of childhood continues. There was only one death from scarlet fever during the year. This is a record and may be compared with 102 deaths from the disease in 1932, when scarlet fever last reached the peak of its periodic prevalence. Deaths from diphtheria were slightly higher, 39 compared with 32.

The numbers of deaths from measles and whooping cough still remain very low. In the case of measles the 24 deaths of last year may be compared with 514 in 1934.

Respiratory Diseases - Deaths from respiratory diseases were considerably more numerous, for there was a minor outbreak of the influenzal type in the early months of the year and deaths from influenza numbered 161 compared with 46 in 1945. Mortality from pneumonia was also higher, 709 against 548; as a matter of fact from the whole of the respiratory group there were 444 more deaths in 1946 than in the previous year, and this accounted for more than half the increase in the total mortality rate for the city from all causes.

Pulmonary Tuberculosis - The increase in respiratory mortality probably also influenced the death rate from tuberculosis, for the number of deaths, 1,173, in 1946 is higher by 37 than the number occurring in 1944.

Infant Mortality - The infant mortality rate for the city was 67 per thousand births, which is below the substantially reduced rate of 1945. This is the lowest on record. A comparison with previous years is shown in the following table:

	<u>1944</u>	<u>1945</u>	<u>1946</u>
Number of Births	22,211	20,083	23,474
Birth Rate	21.2	19.0	22.4
Deaths under 1 Year	2,108	1,371	1,579
Infant Mortality per 1,000 Births	95	68	67

The birth rate, 22.4, per thousand of the population, is the highest recorded in the city in the past 20 years.

STUART LAIDLAW,

20th January, 1947.

Medical Officer of Health.

In addition to the work carried out by this Department, the Master of Works, in co-operation with the Department of Agriculture for Scotland, instituted a scheme of poisoning in several hundreds of the sewer manholes which it is estimated resulted in the destruction of over 11,000 rats.

The inertia or complacency of occupiers whose premises contain material other than foodstuffs tends to provide the vermin with suitable harbourage and breeding places. Many of these tenants are unwilling to enter a scheme for trapping because, as they say, "the rats don't bother us."

The existing legislation is not entirely satisfactory in respect that unless the premises are unoccupied the owner has no legal responsibility to carry out rat destruction.

Many pavement gratings are invitingly open to rats desirous of gaining access beneath the floors of premises. These should be concreted over or covered with wire netting and disused basement cellars with wooden doors should be built up with brick.

The negligent tenants who throw foodstuffs from the windows or fail to place waste food in the bins provided also contribute to the increase of the vermin. An amendment to the present Rats and Mice (Destruction) Act, 1919, with powers to local authorities to make bye-laws would help the inspectors in their efforts to combat the nuisance.

## APPENDIX

TABLE I.—GLASGOW, 1945.—POPULATION AS AT THE CENSUS IN EACH MUNICIPAL WARD, ACREAGE, AND PERSONS PER ACRE.

MUNICIPAL WARDS	POPULATION				Acreage	Persons per acre including Institutions and Shipping
	Without Institutions and Shipping	Institu- tions	Shipping	Total		
1. Shettleston and Tollcross	44,434	279	—	44,713	1,473	30
2. Parkhead ...	36,962	839	—	37,801	883	43
3. Dalmarnock ...	28,693	27	—	28,720	288	100
4. Calton ...	22,548	1,861	—	24,409	333	73
5. Mile-end ...	17,614	—	—	17,614	191	92
6. Whitevale ...	18,067	81	—	18,148	176	103
7. Dennistoun ...	24,941	373	—	25,314	280	90
8. Provan ...	42,644	880	—	43,524	2,935	15
9. Cowlairs ...	20,153	1,139	—	21,292	456	47
10. Springburn ...	24,674	4,166	—	28,840	4,741	6
11. Townhead ...	22,315	1,389	—	23,704	175	135
12. Exchange ...	11,190	2,502	7	13,699	289	47
13. Blythswood ...	8,754	3,549	11	12,314	242	50
14. Anderston ...	20,722	932	806	22,460	422	53
15. Sandyford ...	15,837	633	—	16,470	152	108
16. Park ...	19,100	376	—	19,476	272	71
17. Cowcaddens ...	27,806	788	1	28,595	488	59
18. Woodside ...	28,045	624	—	28,669	170	168
19. Ruchill ...	48,600	1,105	2	49,707	2,105	24
20. North Kelvin	19,259	64	—	19,323	146	132
21. Maryhill ...	24,773	1,867	4	26,644	2,210	12
22. Kelvinside ...	25,785	1,053	—	26,838	1,127	24
23. Partick (East)	23,562	832	—	24,394	268	91
24. " (West)	20,707	—	123	20,830	357	58
25. Whiteinch ...	30,732	653	13	31,398	1,266	25
26. Hutchesontown	33,174	20	—	33,194	387	86
27. Gorbals ...	37,319	591	—	37,910	252	150
28. Kingston ...	23,995	334	163	24,492	285	86
29. Kinning Park	29,674	238	245	30,157	379	79
30. Govan ...	34,396	393	—	34,789	529	66
31. Fairfield ...	29,895	1,627	104	31,626	1,403	22
32. Pollokshields	48,556	2,350	—	50,906	4,837	10
33. Camphill ...	17,300	59	—	17,359	366	47
34. Pollokshaws ...	26,512	73	—	26,585	3,324	8
35. Govanhill ...	28,253	357	—	28,610	365	78
36. Langside ...	16,386	769	—	17,155	557	31
37. Cathcart ...	29,047	163	—	29,210	2,949	10
38. Yoker and Knightswood	33,595	116	—	33,711	2,647	13
CITY ...	1,015,419	33,102	1,479	1,050,000	39,725	26

TABLE II.—GLASGOW, 1945.—INHABITED AND UNOCCUPIED HOUSES IN EACH MUNICIPAL WARD.

MUNICIPAL WARDS	INHABITED HOUSES*				Empty Houses
	1945	1944	Decrease	Increase	
1. Shettleston and Tollcross ... ..	11,774	11,729	—	45	4
2. Parkhead ... ..	10,048	10,042	—	6	2
3. Dalrnarnock... ..	8,090	8,088	—	2	7
4. Calton ... ..	6,056	6,061	5	—	4
5. Mile-end ... ..	4,944	4,828	—	116	3
6. Whitevale ... ..	5,146	5,141	—	5	—
7. Dennistoun ... ..	7,195	7,213	18	—	8
8. Provan ... ..	11,679	11,686	7	—	5
9. Cowlairs ... ..	6,249	6,243	—	6	—
10. Springburn ... ..	6,471	6,463	—	8	18
11. Townhead ... ..	6,111	6,097	—	14	1
12. Exchange ... ..	3,185	3,274	89	—	19
13. Blythswood ... ..	2,295	2,314	19	—	7
14. Anderston ... ..	5,637	5,641	4	—	2
15. Sandyford ... ..	4,108	4,098	—	10	5
16. Park ... ..	5,525	5,512	—	13	12
17. Cowcaddens ... ..	7,788	7,827	39	—	6
18. Woodside ... ..	8,370	8,397	27	—	13
19. Ruchill ... ..	12,229	12,225	—	4	1
20. North Kelvin ... ..	6,035	6,038	3	—	22
21. Maryhill ... ..	6,870	6,872	2	—	—
22. Kelvinside ... ..	8,818	8,823	5	—	70
23. Partick (East) ... ..	6,654	6,639	—	15	14
24. „ (West) ... ..	6,523	6,504	—	19	4
25. Whiteinch ... ..	9,069	9,104	35	—	22
26. Hutchesontown ... ..	9,669	9,676	7	—	2
27. Gorbals ... ..	9,683	9,722	39	—	10
28. Kingston ... ..	6,180	6,169	—	11	7
29. Kinning Park ... ..	8,313	8,311	—	2	3
30. Govan ... ..	9,034	9,037	3	—	3
31. Fairfield ... ..	8,295	8,300	5	—	1
32. Pollokshields ... ..	14,494	14,180	—	314	28
33. Camphill ... ..	5,997	5,984	—	13	11
34. Pollokshaws ... ..	7,664	7,668	4	—	7
35. Govanhill ... ..	8,467	8,472	5	—	4
36. Langside ... ..	5,216	5,292	76	—	8
37. Cathcart ... ..	9,518	9,521	3	—	11
38. Yoker and Knightswood ... ..	9,629	9,589	—	40	4
CITY ... ..	289,028	288,780	—	248	348

\* Includes Inhabitant Occupiers

TABLE III.—GLASGOW.—LININGS GRANTED BY DEAN OF GUILD COURT IN YEARS FROM 1919 IN RESPECT OF HOUSES.

Year ending 31st August.	NUMBER OF APARTMENTS.						TOTAL.
	1.	2.	3.	4.	5.	6.	
1919-20 (Annual Average)	—	6	692	246	107	29	1,080
1921-25 (do)	—	308	638	400	234	51	1,631
1926 ...	—	318	4,649	967	769	93	6,796
1927 ...	—	228	2,889	1,209	802	55	5,183
1928 ...	—	132	4,184	2,238	314	17	6,885
1929 ...	—	570	1,656	1,024	124	82	3,456
1930 ...	—	506	1,958	1,295	230	202	4,191
1931 ...	—	122	2,220	1,900	38	26	4,306
1932 ...	33	529	3,464	1,251	70	4	5,351
1933 ...	—	270	1,845	3,162	337	23	5,637
1934 ...	34	603	1,825	787	80	52	3,381
1935 ...	—	220	2,082	792	128	9	3,231
1936 ...	—	—	1,462	1,320	290	12	3,084
1937 ...	—	2	687	847	301	34	1,871
1938 ...	—	—	2,017	3,068	824	50	5,859
1939 ...	—	—	2,159	3,324	717	2	6,202
1940-43 ...	—	—	—	—	—	—	—
1944 ...	36	—	—	5	1	—	42
1945 ...	—	—	79	94	5	—	178

TABLE IV.—ABSTRACT OF METEOROLOGICAL OBSERVATIONS TAKEN AT SPRINGBURN PUBLIC PARK.

MONTHS.	TEMPERATURE.			RAINFALL.		SUNSHINE Hours.
	Highest Temp. in Shade.	Lowest Temp. in Shade.	Mean Temp.	No. of Days.	Amount Collected in inches.	
1945.						
January ...	48	11	31·1	17	3·59	46·1
February ...	54	24	41·9	27	5·74	40·9
March ...	71	28	46·0	17	3·09	71·4
April ...	71	27	47·3	13	2·14	166·6
May ...	74	30	50·8	23	4·34	152·6
June ...	78	44	56·0	24	4·43	171·6
July ...	78	44	60·6	17	3·26	159·4
August ...	81	46	59·6	15	2·42	167·7
September ...	74	39	56·4	19	5·21	82·1
October ...	69	35	50·7	19	5·53	72·4
November ...	59	29	43·9	18	0·66	39·2
December ...	53	26	39·3	24	3·21	29·0
1935 ...	80	15	47·2	230	43·44	1,211
1936 ...	80	17	47·2	230	40·85	1,076
1937 ...	80	15	47·0	212	31·66	1,183
1938 ...	76	20	48·1	242	49·76	1,174
1939 ...	88	18	47·6	212	38·41	1,177
1940 ...	85	6	46·5	210	39·52	1,111
1941 ...	80	12	46·3	204	33·34	1,035
1942 ...	80	18	46·3	220	40·64	1,067
1943 ...	86	23	48·0	252	45·43	1,094
1944 ...	80	21	47·3	231	44·44	953
1945 ...	81	11	48·6	233	43·62	1,199



TABLE V.—GLASGOW.—BIRTHS AND BIRTH-RATES *per Million* IN EACH WARD, FOR THE YEAR 1945, AND NUMBER AND PERCENTAGE OF ILLEGITIMATE BIRTHS.

MUNICIPAL WARDS.	Births 1945	Birth- rate 1945	Birth- rate 1944	Illegitimate Births.	
				No.	% Total Births.
1. Shettleston and Tollcross ...	826	18,473	19,430	53	6.4
2. Parkhead ... ..	703	18,597	21,195	68	9.7
3. Dalmarnock ... ..	640	22,284	21,888	44	6.9
4. Calton ... ..	505	20,689	19,813	59	11.7
5. Mile-end ... ..	397	22,539	23,684	32	8.1
6. Whitevale ... ..	363	20,002	21,503	25	6.9
7. Dennistoun ... ..	407	16,078	16,200	20	4.9
8. Provan ... ..	862	19,805	20,887	71	8.2
9. Cowlares ... ..	418	19,632	19,417	20	4.8
10. Springburn ... ..	454	16,076	19,010	37	8.1
11. Townhead ... ..	475	20,033	23,411	49	10.3
12. Exchange ... ..	273	19,923	22,134	45	16.5
13. Blythswood ... ..	190	14,494	18,172	32	16.8
14. Anderston ... ..	445	20,550	23,633	51	11.4
15. Sandyford ... ..	332	20,158	20,783	46	13.8
16. Park ... ..	348	17,867	18,334	59	16.9
17. Cowcaddens ... ..	672	23,501	23,109	71	10.6
18. Woodside ... ..	637	22,217	21,050	80	12.5
19. Ruchill ... ..	966	19,435	18,835	61	6.3
20. North Kelvin ... ..	384	19,868	20,765	28	7.3
21. Maryhill ... ..	467	17,530	17,706	48	10.3
22. Kelvinside ... ..	348	12,967	14,755	15	4.3
23. Partick (East) ... ..	433	17,661	21,272	33	7.6
24. „ (West) ... ..	408	19,691	20,185	24	5.9
25. Whiteinch ... ..	585	18,639	17,914	32	5.5
26. Hutchesontown... ..	691	20,817	21,785	40	5.8
27. Gorbals ... ..	1,051	27,604	25,560	141	13.4
28. Kingston ... ..	527	21,445	23,229	59	11.1
29. Kinning Park ... ..	703	23,502	22,608	59	8.3
30. Govan ... ..	845	24,217	24,729	74	8.7
31. Fairfield ... ..	547	17,353	20,188	22	4.0
32. Pollokshields ... ..	913	17,935	21,574	37	4.0
33. Camplhill ... ..	254	14,632	15,244	7	2.7
34. Pollokshaws ... ..	486	18,281	18,575	48	9.9
35. Govanhill ... ..	494	17,267	18,750	25	5.1
36. Langside ... ..	210	12,241	14,869	9	4.3
37. Cathcart ... ..	396	13,557	12,604	20	5.0
38. Yoker and Knightswood ...	615	18,243	17,469	25	4.1
Institutions ... ..	24	—	—	15	6.2
Harbour ... ..	—	—	—	—	—
CITY ... ..	20,294	19,328	20,209	1684	8.3

TABLE VI.—GLASGOW.—DEATHS AND DEATH-RATES *per Million* IN EACH MUNICIPAL WARD, FOR THE YEAR 1945, AND CORRESPONDING RATES FOR 1944 AND 1943.

MUNICIPAL WARDS.	Deaths 1945	Death-rates		
		1945	1944	1943
1. Shettleston and Tollcross ...	510	11,478	11,690	12,624
2. Parkhead ... ..	525	14,204	13,549	14,733
3. Dalmarnock ... ..	347	12,093	14,104	13,701
4. Calton ... ..	373	16,542	16,468	16,886
5. Mile-end ... ..	231	13,114	14,925	15,181
6. Whitevale ... ..	255	14,114	14,723	13,971
7. Dennistoun ... ..	303	12,149	12,905	14,377
8. Provan ... ..	570	13,366	13,696	12,738
9. Cowlairs ... ..	236	11,710	12,751	12,802
10. Springburn ... ..	283	11,755	12,672	12,693
11. Townhead ... ..	322	14,430	15,076	15,538
12. Exchange ... ..	154	13,762	18,062	17,066
13. Blythswood ... ..	143	16,335	17,427	15,461
14. Anderston ... ..	285	13,753	15,124	14,061
15. Sandyford ... ..	225	14,207	14,733	14,085
16. Park ... ..	274	14,345	16,305	17,016
17. Cowcaddens ... ..	400	14,385	16,051	14,632
18. Woodside ... ..	396	14,120	15,445	14,667
19. Ruchill ... ..	536	11,029	12,789	12,309
20. North Kelvin ... ..	237	12,306	13,478	14,689
21. Maryhill ... ..	292	11,787	12,860	13,065
22. Kelvinside ... ..	343	13,302	12,158	14,343
23. Partick (East) ... ..	316	13,411	13,938	14,961
24. „ (West) ... ..	268	12,942	12,289	11,707
25. Whiteinch ... ..	362	11,779	12,596	12,269
26. Hutchesontown ... ..	378	11,394	12,398	12,502
27. Gorbals ... ..	559	14,979	16,103	15,985
28. Kingston ... ..	306	12,753	14,514	14,351
29. Kinning Park ... ..	389	13,109	14,142	14,092
30. Govan ... ..	444	12,908	14,168	13,573
31. Fairfield ... ..	316	10,570	11,421	12,163
32. Pollokshields ... ..	607	12,501	12,533	14,128
33. Camphill ... ..	266	15,376	13,022	16,611
34. Pollokshaws ... ..	327	12,334	12,616	12,046
35. Govanhill ... ..	392	13,875	13,216	12,921
36. Langside ... ..	214	13,060	13,038	15,729
37. Cathcart ... ..	387	13,323	12,514	13,082
38. Yoker and Knightswood ...	381	11,341	11,108	10,984
Institutions ... ..	777	—	—	—
Harbour ... ..	12	—	—	—
CITY ... ..	13,941	13,277	13,908	14,181

TABLE VII.—GLASGOW.—NUMBER OF OUTWARD AND INWARD TRANSFER DEATHS FOR THE YEAR 1945.

CAUSE OF DEATH.	Outward Transfers	Inward Transfers
1. Typhoid and Paratyphoid Fevers ... ..	—	—
2. Cerebrospinal Fever ... ..	4	—
3. Scarlet Fever ... ..	1	—
4. Whooping Cough ... ..	—	—
5. Diphtheria ... ..	1	—
6. Erysipelas ... ..	—	1
7. Tuberculosis of Respiratory System ... ..	47	124
8. Tubercular Meningitis ... ..	24	5
9. Abdominal Tuberculosis ... ..	5	3
10. Other Tuberculous Disease ... ..	16	10
11. Syphilitic Disease ... ..	8	2
12. influenza ... ..	1	—
13. Measles ... ..	3	—
14. Acute Poliomyelitis and Polioencephalitis ... ..	3	—
15. Acute Infectious Encephalitis ... ..	—	3
16. Cancer—all forms ... ..	380	65
17. Diabetes ... ..	52	4
18. Intra-cranial Vascular Lesions ... ..	91	54
19. Other Nervous Diseases ... ..	35	26
20. Heart Disease ... ..	230	146
21. Other Diseases of Circulatory System ... ..	39	14
22. Bronchitis ... ..	18	5
23. Pneumonia ... ..	46	22
24. Other Respiratory Diseases ... ..	14	4
25. Ulceration of the Stomach and the Duodenum ... ..	58	4
26. Diarrhoea (under 2 years) ... ..	39	13
27. Appendicitis ... ..	34	4
28. Other Digestive Diseases ... ..	119	19
29. Nephritis ... ..	38	16
30. Puerperal and Post-abortive Sepsis ... ..	6	1
31. Other Maternal Causes ... ..	12	—
32. Premature Birth ... ..	47	9
33. Congenital Malformations, Birth Injury, Infantile Disease ... ..	62	16
34. Suicide, Road Traffic Accidents, and other Violent Causes ... ..	145	50
35. All Other Causes ... ..	283	70
TOTAL ... ..	1,861	690

TABLE VIII. GLASGOW. -DEATHS AND DEATH-RATES *per Million* FROM DIFFERENT CAUSES, FOR THE YEAR 1945, AND CORRESPONDING RATES FOR 1944 AND 1943.

CAUSE OF DEATH.	Deaths		Annual Death-rate per Million.		
	1945	1945	1944	1943	1943
1. Typhoid and Paratyphoid Fevers ...	3	3	1	3	3
2. Cerebro-spinal Fever ... ..	31	29	27	23	23
3. Scarlet Fever ... ..	4	4	7	5	5
4. Whooping Cough ... ..	35	33	34	86	86
5. Diphtheria ... ..	33	31	59	77	77
6. Erysipelas ... ..	8	8	6	9	9
7. Tuberculosis of Respiratory System	1,085	1,033	1,080	1,013	1,013
8. Tubercular Meningitis ... ..	167	159	185	210	210
9. Abdominal Tuberculosis ... ..	22	21	18	33	33
10. Other Tuberculosis Diseases ...	73	69	76	78	78
11. Syphilitic Disease ... ..	59	56	43	73	73
12. Influenza ... ..	46	44	75	196	196
13. Measles ... ..	24	23	15	30	30
14. Acute Poliomyelitis and Polioen- cephalitis ... ..	2	2	—	4	4
15. Acute Infectious Encephalitis ...	22	21	10	25	25
16. Cancer—All forms ... ..	1,924	1,832	1,690	1,768	1,768
17. Diabetes ... ..	167	159	126	148	148
18. Intra-cranial Vascular Lesions ...	1,318	1,255	1,242	1,211	1,211
19. Other Nervous Diseases ... ..	307	292	309	323	323
20. Heart Disease ... ..	3,265	3,110	3,011	3,136	3,136
21. Other Diseases of Circulatory System	278	265	274	254	254
22. Bronchitis ... ..	340	324	312	306	306
23. Pneumonia ... ..	555	529	696	840	840
24. Other Respiratory Diseases ...	96	91	118	143	143
25. Ulceration of the Stomach and the Duodenum ... ..	103	98	96	105	105
26. Diarrhoea (under 2 years) ... ..	385	367	668	323	323
27. Appendicitis ... ..	52	50	50	33	33
28. Other Digestive Diseases ... ..	336	320	329	321	321
29. Nephritis ... ..	237	226	273	267	267
30. Puerperal and Post-abortive Sepsis	29	28	37	39	39
31. Other Maternal Causes ... ..	45	43	48	67	67
32. Premature Birth ... ..	350	333	423	410	410
33. Congenital Malformations, Birth Injury, Infantile Diseases ...	288	274	395	377	377
34. Suicide, Road Traffic Accidents, and other Violent Causes ... ..	553	527	565	651	651
35. All other Causes ... ..	1,699	1,618	1,610	1,594	1,594
36. Smallpox ... ..	—	—	—	—	—
ALL CAUSES ... ..	13,941	13,277	13,908	14,181	14,181

TABLE X.—GLASGOW, 1945.—DEATHS OCCURRING IN INSTITUTIONS FOR THE TREATMENT OF THE SICK, NURSING HOMES, &amp;c.

CAUSE OF DEATH.	Local Authority General Hospitals and Poorhouses.	Local Authority Fever Hospitals and Sanatoria.	Local Authority Mental Hospitals.	Voluntary Hospitals and Infirmaries.	Nursing Homes, &c.	Totals.	% of all Deaths.	Outward Transfer Deaths.
1. Typhoid and Paratyphoid Fevers ... ..	—	—	3	—	—	3	100.0	—
2. Cerebrospinal Fever ... ..	—	23	—	3	—	26	83.8	4
3. Scarlet Fever ... ..	—	4	—	—	—	4	100.0	1
4. Whooping Cough ... ..	1	20	—	—	—	21	60.0	—
5. Diphtheria ... ..	1	27	—	1	—	29	87.8	1
6. Erysipelas ... ..	—	6	—	—	—	6	75.0	—
7. Tuberculosis of Respiratory System ... ..	132	358	50	67	2	609	56.1	45
8. Tubercular Meningitis ... ..	10	125	—	23	—	158	94.6	24
9. Abdominal Tuberculosis ... ..	1	7	1	8	1	18	81.8	5
10. Other Tuberculous Disease ... ..	10	33	3	14	—	60	82.1	15
11. Syphilitic Disease ... ..	23	4	8	10	—	45	76.2	8
12. Influenza ... ..	1	—	—	2	—	3	6.5	1
13. Measles ... ..	—	15	—	—	—	15	62.5	3
14. Acute Poliomyelitis and Polioencephalitis ... ..	—	—	—	1	—	1	50.0	3
15. Acute Infectious Encephalitis ... ..	6	—	7	—	1	14	63.6	—
16. Cancer—all forms ... ..	460	21	32	351	33	897	46.6	363
17. Diabetes ... ..	42	2	4	44	2	94	56.2	50
18. Intracranial Vascular Lesions ... ..	368	13	46	133	23	583	44.2	82
19. Other Nervous Diseases ... ..	69	22	34	33	6	164	53.4	34
20. Heart Disease ... ..	677	29	127	193	56	1,082	33.1	192
21. Other Diseases of Circulatory System ... ..	92	1	15	41	3	152	54.6	37
22. Bronchitis ... ..	81	3	10	39	1	134	39.4	18
23. Pneumonia ... ..	127	168	16	46	6	363	65.4	43
24. Other Respiratory Diseases ... ..	24	4	6	15	2	51	53.1	12
25. Ulceration of the Stomach and the Duodenum ... ..	14	—	2	74	1	91	88.3	58
26. Diarrhoea (under 2 years) ... ..	93	161	5	47	—	306	79.4	37
27. Appendicitis ... ..	5	2	—	42	1	50	96.1	34
28. Other Digestive Diseases ... ..	62	13	9	148	3	235	69.9	119
29. Nephritis ... ..	58	4	10	48	2	122	51.4	35
30. Puerperal and Post-abortive Sepsis ... ..	9	11	1	5	—	26	89.6	5
31. Other Maternal Causes ... ..	20	—	—	17	5	42	93.3	11
32. Premature Birth ... ..	181	7	9	62	16	275	78.5	47
33. Congenital Malformations, Birth Injury, Infantile Disease ... ..	113	14	6	52	19	204	70.8	62
34. Suicide, Road Traffic Accidents, and other Violent Causes ... ..	56	4	2	215	—	277	50.1	129
35. All Other Causes ... ..	378	41	33	229	32	713	36.1	254
YEAR 1945 ... ..	3,113	1,142	439	1,963	215	6,872	49.2	1,732
YEAR 1944 ... ..	3,528	1,245	533	2,213	208	7,727	52.9	1,802

TABLE IX.—GLASGOW, 1945.—DEATHS FROM

CAUSE OF DEATH.	MALES.													Not Stated.	Total Males.		
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	-75	75+				
1. Typhoid and Paratyphoid Fevers ... ..	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
2. Cerebro-spinal Fever ... ..	13	1	3	—	1	2	1	1	—	—	—	—	—	—	—	—	—
3. Scarlet Fever ... ..	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4. Whooping Cough ... ..	9	5	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. Diphtheria ... ..	1	1	10	2	—	1	—	—	—	—	—	—	—	—	—	—	—
6. Erysipelas ... ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
7. Tuberculosis of Respiratory System ... ..	3	5	6	10	6	39	65	93	104	110	97	39	9	—	—	—	586
8. Tubercular Meningitis ... ..	5	8	18	18	12	13	1	5	1	—	1	—	—	—	—	—	—
9. Abdominal Tuberculosis ... ..	—	—	1	1	—	1	1	—	3	1	—	—	—	—	—	—	—
10. Other Tuberculous Disease ... ..	1	—	4	3	2	5	5	5	3	2	4	2	—	—	—	—	—
11. Syphilitic Disease ... ..	2	1	—	—	—	—	—	1	2	7	16	12	1	—	—	—	42
12. Influenza ... ..	5	1	—	—	1	—	—	1	1	4	4	4	2	—	—	—	23
13. Measles ... ..	9	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	13
14. Acute Poliomyelitis and Polioencephalitis ... ..	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
15. Acute Infectious Encephalitis ... ..	—	—	—	—	—	—	—	5	1	1	3	2	—	—	—	—	12
16. Cancer—all forms ... ..	—	1	1	—	—	2	4	4	62	133	262	348	155	—	—	—	972
17. Diabetes ... ..	—	—	—	—	—	—	1	1	3	4	8	18	9	—	—	—	44
18. Intra-cranial Vascular Lesions ... ..	—	1	1	—	—	—	1	3	14	55	122	205	198	—	—	—	610
19. Other Nervous Diseases ... ..	48	4	4	3	3	4	6	11	12	21	15	22	3	—	—	—	156
20. Heart Disease ... ..	1	—	3	4	—	6	7	14	52	195	402	566	456	—	—	—	1706
21. Other Diseases of Circulatory System ... ..	—	—	—	—	—	—	—	—	5	8	24	50	62	—	—	—	149
22. Bronchitis ... ..	13	1	1	2	—	3	—	5	17	21	36	51	52	—	—	—	222
23. Pneumonia ... ..	99	10	10	2	—	3	1	6	15	37	47	65	31	—	—	—	326
24. Other Respiratory Diseases ... ..	2	1	—	1	1	1	—	3	4	8	14	12	5	—	—	—	52
25. Ulceration of the Stomach and the Duodenum ... ..	—	—	—	—	—	—	4	9	10	13	26	19	4	—	—	—	85
26. Diarrhoea (under 2 years) ... ..	225	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	241
27. Appendicitis ... ..	—	—	2	6	5	3	—	1	4	3	3	2	—	—	—	—	29
28. Other Digestive Diseases ... ..	6	1	5	2	1	1	5	2	15	22	29	39	22	—	—	—	150
29. Nephritis ... ..	—	1	2	3	4	—	3	8	13	18	30	23	17	—	—	—	122
30. Puerperal and Post-abortive Sepsis ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
31. Other Maternal Causes ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
32. Premature Birth ... ..	183	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	183
33. Congenital Malformations, Birth Injury, Infantile Diseases ... ..	159	2	1	—	1	—	—	1	1	—	1	—	—	—	—	—	166
34. Suicide, Road Traffic Accidents and other Violent Causes ... ..	8	5	24	47	20	12	14	20	—	48	51	47	33	—	—	—	360
35. Smallpox ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
36. All other Causes ... ..	13	3	8	6	8	9	7	16	48	96	178	300	266	—	—	—	958
<b>ALL CAUSES ... ..</b>	<b>805</b>	<b>71</b>	<b>111</b>	<b>110</b>	<b>65</b>	<b>105</b>	<b>126</b>	<b>216</b>	<b>421</b>	<b>807</b>	<b>1374</b>	<b>1827</b>	<b>1325</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>7363</b>

## DIFFERENT CAUSES IN SEXES AND AT SEVERAL AGE-PERIODS.

CAUSE OF DEATH.	FEMALES.													Total Females.	Total Both Sexes.
	-1	-2	-5	-10	-15	-20	-25	-35	-45	-55	-65	-75	75+		
1. Typhoid and Paratyphoid Fevers ... ..	—	—	—	—	—	—	1	—	1	—	—	—	—	2	3
2. Cerebro-spinal Fever ... ..	9	—	—	—	—	—	—	—	—	—	—	—	—	9	31
3. Scarlet Fever ... ..	—	—	2	—	—	—	—	—	—	—	—	—	—	2	4
4. Whooping Cough ... ..	5	8	3	—	1	—	—	—	—	—	—	—	—	17	35
5. Diphtheria ... ..	—	2	11	5	—	—	—	—	—	—	—	—	—	18	33
6. Erysipelas ... ..	1	—	—	—	—	—	—	—	—	—	4	1	1	7	8
7. Tuberculosis of Respiratory System ... ..	5	7	7	3	8	81	115	154	50	36	20	9	4	499	1085
8. Tubercular Meningitis ... ..	2	6	16	14	20	16	3	3	5	—	—	—	—	85	167
9. Abdominal Tuberculosis ... ..	—	—	—	1	—	6	2	3	1	1	—	—	—	14	22
10. Other Tuberculous Disease ... ..	2	1	6	2	5	6	4	4	2	2	2	1	—	37	73
11. Syphilitic Disease ... ..	—	—	—	—	—	—	1	2	2	4	6	1	1	17	59
12. Influenza ... ..	—	—	—	—	—	—	—	—	1	2	10	4	6	23	46
13. Measles ... ..	4	3	4	—	—	—	—	—	—	—	—	—	—	11	24
14. Acute Poliomyelitis and Polioencephalitis ... ..	—	—	—	—	—	—	—	—	—	—	1	—	—	1	2
15. Acute Infectious Encephalitis ... ..	—	—	—	—	—	—	—	1	1	1	4	3	—	10	22
16. Cancer—all forms ... ..	—	1	1	—	—	3	5	21	77	158	237	269	180	952	1924
17. Diabetes ... ..	—	—	—	—	—	1	1	5	5	13	34	51	13	123	167
18. Intra-cranial Vascular Lesions ... ..	—	—	—	—	—	1	—	5	9	58	123	250	272	718	1318
19. Other Nervous Diseases ... ..	41	4	5	4	1	1	4	8	17	24	15	16	11	151	307
20. Heart Disease ... ..	—	—	1	2	13	4	10	25	66	124	226	458	630	1559	3265
21. Other Diseases of Circulatory System ... ..	—	—	—	—	—	1	1	3	2	7	21	33	61	129	278
22. Bronchitis ... ..	2	1	1	—	—	—	—	4	5	7	15	37	66	138	340
23. Pneumonia ... ..	67	12	5	2	2	4	4	4	10	29	20	27	43	229	555
24. Other Respiratory Diseases ... ..	5	1	1	—	—	—	—	3	4	6	5	8	11	44	96
25. Ulceration of the Stomach and the Duodenum ... ..	—	—	—	—	—	—	1	—	4	—	9	3	1	18	103
26. Diarrhoea (under 2 years) ... ..	138	6	—	—	—	—	—	—	—	—	—	—	—	144	385
27. Appendicitis ... ..	—	—	2	5	—	2	1	2	5	1	2	2	1	23	52
28. Other Digestive Diseases ... ..	1	—	5	2	1	3	5	7	16	18	34	41	53	186	336
29. Nephritis ... ..	—	—	—	3	1	2	2	7	10	18	24	37	11	115	237
30. Puerperal and Post-abortive Sepsis ... ..	—	—	—	—	—	—	8	10	11	—	—	—	—	29	29
31. Other Maternal Causes ... ..	—	—	—	—	—	1	6	20	18	—	—	—	—	45	45
32. Premature Birth ... ..	167	—	—	—	—	—	—	—	—	—	—	—	—	167	350
33. Congenital Malformations, Birth Injury, Infantile Diseases ... ..	109	2	1	—	1	2	1	2	2	1	1	—	—	122	288
34. Suicide, Road Traffic Accidents and other Violent Causes ... ..	7	7	11	16	3	3	2	9	10	17	22	36	50	193	553
35. Smallpox ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
36. All other Causes ... ..	9	1	5	3	4	4	8	23	42	72	104	172	294	741	1699
ALL CAUSES ... ..	574	62	87	62	60	141	185	325	376	599	939	1459	1709	6578	13941

TABLE XI.—GLASGOW.—DEATHS UNDER 1 YEAR AND DEATH-RATES PER 1,000 BIRTHS IN EACH MUNICIPAL WARD, FOR THE YEAR 1945.

MUNICIPAL WARDS.	Deaths —1 Year.	Death Rate per 1,000 Births.		
	1945.	1945.	1944.	1943.
1. Shettleston and Tollcross ... ..	45	54	79	70
2. Parkhead ... ..	55	78	77	93
3. Dalmarnock ... ..	46	72	119	108
4. Calton ... ..	40	79	127	126
5. Mile-End ... ..	30	75	124	92
6. Whitevale ... ..	36	99	122	70
7. Dennistoun ... ..	20	49	84	60
8. Provan ... ..	55	64	96	91
9. Cowlairs ... ..	23	72	92	47
10. Springburn ... ..	27	59	98	74
11. Townhead ... ..	44	93	141	94
12. Exchange ... ..	33	121	154	115
13. Blythswood ... ..	17	89	120	116
14. Anderston ... ..	35	79	97	91
15. Sandyford ... ..	22	66	59	67
16. Park ... ..	14	40	88	54
17. Cowcaddens ... ..	67	100	118	104
18. Woodside ... ..	60	94	109	88
19. Ruchill ... ..	61	63	104	81
20. North Kelvin ... ..	17	44	95	87
21. Maryhill ... ..	25	53	96	78
22. Kelvinside ... ..	15	43	51	48
23. Partick (East) ... ..	35	81	91	89
24. Partick (West) ... ..	15	37	74	42
25. Whiteinch ... ..	32	55	70	50
26. Hutchesontown ... ..	50	72	110	77
27. Gorbals ... ..	119	113	118	126
28. Kingston ... ..	43	82	102	95
29. Kinning Park ... ..	47	67	111	75
30. Govan ... ..	75	89	110	104
31. Fairfield ... ..	25	46	81	74
32. Pollokshields ... ..	37	41	62	55
33. Camphill ... ..	9	35	54	62
34. Pollokshaws ... ..	33	68	61	65
35. Govanhill ... ..	25	51	82	64
36. Langside ... ..	6	24	64	50
37. Cathcart ... ..	9	23	41	34
38. Yoker and Knightswood ... ..	29	47	64	54
Institutions ... ..	3	—	—	—
Harbour ... ..	—	—	—	—
CITY ... ..	1,379	68	95	82



CAUSE OF DEATH.	MALES.					Total.	FEMALES.					Total — 1 year. Both Sexes.	
	Age in Months.						Age in Months.						
	—1	—3	—6	—9	—12		—1	—3	—6	—9	—12		Total.
I. CONGENITAL MALFORMATIONS ...	23	12	3	2	3	43	27	8	3	—	3	41	84
II. DISEASES OF EARLY INFANCY—													
(a) Congenital Debility, Sclerema, and Icterus ...	36	7	6	—	—	49	22	7	—	—	—	29	78
(b) Premature Birth ...	170	13	—	—	—	183	157	8	—	—	—	167	350
(c) Injury at Birth ...	35	—	—	—	—	35	18	—	—	—	—	18	53
(d) Atelectasis ...	18	—	—	—	—	18	11	1	—	1	—	13	31
(e) Others ...	10	3	—	—	1	14	8	—	—	—	—	8	22
III. DISEASES OF RESPIRATORY SYSTEM ...	24	38	31	14	7	114	11	22	23	11	7	74	188
IV. DISEASES OF DIGESTIVE SYSTEM—													
(a) Diarrhoeal ...	17	66	87	37	18	225	11	49	50	16	12	138	363
(b) Others ...	2	1	1	2	—	6	—	—	1	—	—	1	7
V. DISEASES OF NERVOUS SYSTEM ...	7	20	17	2	2	48	4	13	14	3	7	41	89
VI. TUBERCULOUS DISEASES—													
(a) Pulmonary Tuberculosis ...	—	—	1	2	—	3	—	—	3	1	1	5	8
(b) Tuberculous Meningitis ...	—	—	—	—	5	5	—	—	—	1	1	2	7
(c) Abdominal Tuberculosis ...	—	—	—	—	—	—	—	—	—	—	—	—	—
(d) Other Forms ...	—	—	1	—	—	1	—	—	—	2	—	2	3
VII. INFECTIOUS DISEASES—													
(a) Measles ...	—	—	1	6	2	9	1	—	—	2	1	4	13
(b) Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Whooping Cough ...	1	3	1	—	4	9	1	1	—	2	1	5	14
(d) Diphtheria ...	—	—	—	—	1	1	—	—	—	—	—	—	1
(e) Erysipelas ...	—	—	—	—	—	—	—	—	—	—	—	—	1
(f) Cerebro-spinal Fever ...	1	4	3	3	2	13	1	1	—	3	1	9	22
(g) Varicella ...	—	—	—	1	—	1	—	—	—	—	—	—	1
(h) Typhoid and Paratyphoid Fevers ...	—	—	—	—	—	—	—	—	—	—	—	—	—
VIII. SYPHILIS ...	1	1	—	—	—	2	—	—	—	—	—	—	2
IX. OVERLAYING ...	—	1	—	—	—	1	—	—	—	—	—	—	3
X. OTHER VIOLENCE ...	1	4	2	—	—	7	1	—	—	—	2	5	12
XI. ALL OTHER CAUSES ...	5	6	5	1	1	18	2	4	3	—	—	9	27
TOTALS ...	351	179	159	70	46	805	275	116	105	41	37	574	1,379

TABLE XIII.—GLASGOW, 1943-1945. ABSTRACT OF NOTIFICATIONS UNDER NOTIFICATION OF BIRTHS ACT, 1907, AND RESULTS OF VISITS.

	1945	1944	1943
Total Number of Notifications ... ..	20,979	22,639	22,910
Doctor at Home ... ..	2,773	3,283	5,577
Doctor in Nursing Home ... ..	2,285	2,336	
Doctor in Institution ... ..	9,394	9,442	9,319
Maternity Hospital (Outdoor) Nurse ... ..	2,076	2,522	2,853
Midwife in Nursing Home ... ..	392	396	5,150
Certified Midwife ... ..	1,921	4,624	
Municipal Midwife ... ..	2,130		
Others ... ..	8	6	11
Total Cards issued ... ..	16,728	17,942	17,333
Total Cards returned ... ..	16,869	17,929	17,263
Full Information ... ..	16,524	17,539	16,897
Doctor found in Attendance ... ..	—	1	1
Others ... ..	345	389	365

TABLE XIV.—GLASGOW, 1943-1945.—BIRTHS NOTIFIED SHOWING MEDICAL AND NOT MEDICALLY ATTENDED.

	1945	1944	1943
Notifications Received—less Duplicates—			
Total ... ..	20,979	22,639	22,910
Live-births ... ..	20,243	21,878	22,105
Still-births ... ..	736	761	805
Per cent. Still-births to Total ... ..	3.5	3.3	3.5
Medically attended—			
Births at Home ... ..	2,773	3,283	5,577
Births in Nursing Home ... ..	2,285	2,366	
In Institutions ... ..	9,394	9,442	9,319
Total ... ..	14,452	15,091	14,896
Per cent. ... ..	68.8	66.6	65.0
Still-births at Home ... ..	75	83	104
Still-births in Nursing Home ... ..	60	52	
Still-births in Institutions ... ..	469	626	509
Not Medically attended—			
Maternity Hospital, Outdoor Nurse ... ..	2,076	2,522	2,853
Certified Midwives in Nursing Home ... ..	392	396	5,150
Certified Midwives in Private Practice ... ..	1,921	4,624	
Municipal Midwives ... ..	2,130		
Others ... ..	8	6	11
Total ... ..	6,527	7,548	8,014
Per cent. ... ..	31	33	35
Still-births ... ..	132	177	192

TABLE XV. GLASGOW, 1944 and 1945.—CASES OF INFECTIOUS DISEASE REGISTERED AND NUMBERS OF THESE TREATED IN FEVER HOSPITALS, &amp;C.

	1945				1944			
	Fever Hosp.	Other Institutions	Home	Total	Fever Hosp.	Other Institutions	Home	Total
A.—Notifiable—								
Typhus Fever ... ..	—	—	—	—	—	—	—	—
Enteric Fever ... ..	11	—	—	11	25	—	2	27
Paratyphoid B ... ..	26	—	1	27	4	—	—	4
Continued and Undefined Fever ... ..	—	—	—	—	4	—	—	4
Puerperal Fever ... ..	257	27	4	288	290	44	3	337
Puerperal Pyrexia ... ..	85	107	12	204	90	96	20	206
Smallpox ... ..	2	—	—	2	—	—	—	—
Scarlet Fever ... ..	2,768	1	648	3,417	2,725	21	670	3,416
Diphtheria and Membranous Croup ... ..	1,960	1	9	1,970	2,364	3	10	2,377
Erysipelas ... ..	257	2	266	525	268	13	283	564
Cholera ... ..	—	—	—	—	—	—	—	—
Cerebro-spinal Fever ... ..	116	6	8	130	121	2	6	129
Ophthalmia Neonatorum ... ..	48	3	276	327	51	16	465	532
Trachoma ... ..	—	4	4	8	—	4	7	11
Acute Encephalitis Lethargica ... ..	—	1	3	4	2	1	—	3
Acute Polio-Encephalitis ... ..	—	—	—	—	1	—	—	1
Acute Poliomyelitis ... ..	5	—	2	7	21	1	2	24
Acute Primary Pneumonia ... ..	2,547	1,216	1,113	4,876	2,965	1,046	1,669	5,680
Acute Influenzal-Pneumonia ... ..	33	25	20	78	35	12	43	90
Malaria ... ..	15	7	3	25	9	4	3	16
Dysentery ... ..	1,066	36	372	1,474	832	30	397	1,259
Infective Jaundice ... ..	4	—	—	4	—	—	—	—
Anthrax ... ..	—	—	—	—	1	—	—	1
Pulmonary Tuberculosis ... ..	967	—	1,674	2,641	1,062	—	1,696	2,758
Other Forms of Tuberculosis ... ..	177	—	378	555	203	—	468	671
B.—Not Notifiable								
Measles ... ..	702	2	5,308	6,012	619	10	5,735	6,364
German Measles ... ..	66	—	525	591	44	2	672	718
Whooping-cough ... ..	185	1	2,589	2,775	269	3	3,418	3,690
Chickenpox ... ..	278	2	4,992	5,272	245	14	7,256	7,515
Mumps ... ..	37	—	4	41	93	2	14	109
Pemphigus Neonatorum ... ..	20	—	13	33	39	—	11	50
Leprosy ... ..	1	—	—	1	—	—	—	—
Totals ... ..	11,633	1,441	18,224	31,298	12,382	1,324	22,850	36,556
Notified, but diagnosis altered to Non-Infectious Diseases ... ..	2,257	2	1	2,260	1,939	—	—	1,939
Total Registered ... ..	13,890	1,443	18,225	33,558	14,321	1,324	22,850	38,495

Where patients suffer from two or more diseases, each disease is reckoned as a case.

Apart from cases of pneumonia admitted to Corporation General Hospitals and Voluntary Institutions in times of pressure; cases of puerperal fever, puerperal pyrexia, and ophthalmia neonatorum occurring in other than Fever Hospitals and allowed to remain; and cases of trachoma treated in Stobhill Hospital; the cases shown under the headings "Corporation General Hospitals" and "Other Institutions" are, for the most part, accidental.

TABLE XVI.—CASES OF INFECTIOUS DISEASE REGISTERED IN EACH MONTH IN 1945.

	MONTH.												YEAR.	
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Hosp.	Home
	Typhus Fever ..	1	1	9	3	7	2	6	4	2		1	2	37
Enteric, including Paratyphoid Fever														
Continued and Undefined Fever	24	25	29	33	21	24	23	17	18	27	22	25	284	4
Puerperal Fever	21	17	10	21	16	23	17	16	10	23	19	11	192	12
Puerperal Pyrexia				1									2	
Smallpox	301	242	269	249	274	235	235	226	254	416	325	391	2,769	648
Scarlet Fever	171	161	168	145	146	140	110	164	146	207	220	192	1,961	9
Diphtheria and Membranous Croup	44	40	38	40	51	38	40	38	40	55	47	54	289	266
Erysipelas	17	19	17	6	12	11	11	3	7	8	11	8	122	8
Cerebro-spinal Fever	40	27	26	26	37	40	29	26	23	19	17	17	51	276
Ophthalmia Neonatorum	1		2	1	1	2			1				4	4
Trachoma			2							1		1	1	3
Acute and Chronic Encephalitis Lethargica														
Acute Poliioencephalitis				1	1			2		2				2
Acute Poliomyelitis	668	505	551	364	422	330	280	232	296	302	401	525	3,763	1,113
Acute Primary Pneumonia	10	12	4	3	2	4	4	4	13	4	7	11	58	20
Acute Influenzal Pneumonia		2	1	1	1		6	2	2	1	4	5	22	3
Malaria	111	98	109	173	128	116	56	105	197	192	107	82	1,102	372
Dysentery	233	233	275	235	243	198	207	192	174	236	229	186	967	1,674
Pulmonary Tuberculosis	46	49	57	47	56	52	50	43	32	45	47	31	177	378
Tuberculosis	267	386	784	966	1,312	1,067	175	120	131	195	304	305	704	5,368
Measles	54	57	99	84	116	88	5	10	13	31	22	12	66	525
German Measles	530	427	479	497	334	184	19	47	94	57	41	63	186	2,589
Whooping Cough	757	616	643	631	783	657	46	53	122	307	330	327	280	4,992
Chickenpox														
Total	3,296	2,918	3,573	3,527	3,963	3,211	1,319	1,304	1,575	2,128	2,157	2,248	31,219	18,207
Hospital	1,264	1,071	1,239	1,131	1,201	1,013	869	904	936	1,125	1,076	1,183	13,012	
Home	2,032	1,847	2,334	2,396	2,762	2,198	450	400	639	1,003	1,081	1,065		

\* Infective Jaundice, 4; Mumps, 41; Leprosy, 1; Pemphigus Neonatorum, 33.

Add \* others  
Altered Diagnosis

62  
2,259  
15,333  
18,225

TABLE XVII.

## OPERATIONS OF SANITARY SECTION.

	1939.	1940.	1941.	1942.	1943.	1944.	1945.
<b>I. (a) Nuisances.</b>							
<b>INSPECTIONS made—</b>							
Nuisances .....	567,137	574,284	511,120	508,668	498,836	498,639	523,301
Bug Disinfestation .....	4,283	2,609	1,689	975	1,755	2,047	2,100
Water Storage Cisterns .....	979	3,208	3,493	1,512	4,450	669	3,321
Linewashings .....	34,692	30,782	23,747	25,489	24,535	21,923	23,943
Stair Cleaning .....	74,171	69,790	55,719	56,709	49,422	50,505	40,996
Drain Testing .....	32,774	29,047	19,563	13,755	8,438	9,160	9,787
Rats and Mice Destruction Acts	—	2,018	3,322	4,992	5,731	11,054	12,405
<b>Total .....</b>	<b>714,036</b>	<b>711,738</b>	<b>618,653</b>	<b>612,100</b>	<b>593,167</b>	<b>593,997</b>	<b>615,853</b>
<b>Nuisances removed or remedied</b>							
<b>Consisting of—</b>							
Apartments, Lobbies, or W.C.'s, with insufficient light or venti- lation, or otherwise defective in construction .....	13	13	5	14	13	6	3
Defective Chimneys causing nuis- ance .....	348	399	382	498	627	498	497
Disrepair or dampness in Dwell- ing-houses .....	6,931	7,341	5,324	6,502	6,756	7,634	8,699
Offensive smells from Drains, or other reasonable grounds— smoke test .....	202	192	89	12	15	10	5
Drains, Conductors, Soil-pipes, or Roses choked or defective .....	20,861	28,849	26,634	25,693	23,957	25,122	31,262
Sanitary Fittings choked or defective .....	3,257	5,090	4,458	3,778	3,606	3,912	4,980
Dirty Houses and Bedding .....	554	429	492	867	1,150	1,440	1,581
Dirty Closets, Stairs, etc. (daily and bi-weekly cleaning) .....	4,634	4,214	2,807	3,433	2,942	2,778	2,417
Houses overcrowded .....	269	1,255	851	782	1,282	1,157	1,045
Common passages, stairs or stair- cases not in a cleanly state (linewashing or painting) .....	7,983	5,535	4,060	2,466	3,887	2,989	3,280
Animals or Poultry kept so as to be a nuisance .....	19	14	5	18	29	43	28
Accumulation of Garbage or Rubbish .....	1,246	1,202	784	784	624	604	644
Smells from Decaying Animal Matter or other cause .....	42	73	92	65	65	48	41
Stagnant Water .....	102	148	96	64	101	105	121
Premises infested with Rats or other vermin .....	611	636	529	718	774	1,101	938
Skull accommodation and Water Supply required .....	—	—	—	3	2	1	2
Water-Closet accommodation re- quired .....	3	4	3	3	2	2	—
Water Storage Cisterns dirty, uncovered, or unventilated .....	895	823	1,121	394	1,552	246	1,388
Water Supply Pipes defective— tenants without water .....	392	3,068	2,304	495	512	692	1,775

TABLE XVII. *Continued.*OPERATIONS OF SANITARY SECTION *Continued.*

	1939	1940.	1941.	1942.	1943	1944	1945
Pit Shaft without adequate protection ... ..	2	—	—	—	—	—	—
Reports to Gas Manager ...	15	14	3	8	7	15	11
„ Master of Works ...	2,407	3,401	2,678	2,823	3 145	3 287	4 819
„ Superintendent of Cleansing ... ..	55	76	137	1,120	165	315	234
„ Water Engineer ...	2,228	3,577	3,461	2,938	2,398	2 444	3,109
Prosecutions—Sheriff Court ...	—	1	—	1	3	1	2
„ Police Court ...	10	32	72	92	143	91	38
Number Successful ... ..	10	32	71	90	141	91	30
Amount of Fines ... ..	£0 15 0	£11 8 0	£26 19 6	£34 13 0	£55 19 4	£41 18 6	£24 13 0
Number of Rotation Cards for Cleansing of Common Stairs, Lobbies, and W.C.'s served on Tenants ... ..	13,518	13,769	12,910	10,991	9,988	12 631	11 400
<b>1. (b) Drain Testing.</b>							
Number of Applications for satisfaction of Dean of Guild Court ... ..	2,287	1,172	728	969	567	502	594
Number of first Applications to old Tenements or Systems ...	216	254	104	43	41	38	22
Number of these found more or less defective ... ..	192	210	89	33	12	21	16
Subsequent applications to old Tenements or Systems ...	236	210	75	32	25	23	9
<b>2. Common Lodging Houses.</b>							
Number measured and registered	—	—	—	—	—	—	—
Total number now on register ...	31	29	29	29	29	28	27
With accommodation for ...	9,203½	8,270½	8,597½	8,692½	8,590½	7,769½	8,080½
Number of inspections by day	867	954	825	996	1,030	862	818
Number of inspections by night	10	10	4	3	8	—	—
Number of irregularities ...	93	137	98	97	119	44	38
Number of prosecutions ... ..	—	—	—	1	—	—	—
Amount of Fine ... ..	—	—	—	£5 0 0	—	—	—
<b>3. Boarding Houses for   Emigrants and Seamen.</b>							
Number measured and registered	—	—	3	3	2	1	—
Total number now on register ...	2	2	5	8	9	9	8
With accommodation for ...	194	194	499	779½	837½	837½	742½
Number of inspections by day	21	16	52	255	248	213	240
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities ... ..	—	—	—	2	8	4	3
Number of prosecutions ... ..	—	—	—	—	—	—	—

TABLE XVII. *Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	1939.	1940.	1941.	1942.	1943.	1944.	1945.
<b>4. Houses-Let-in-Lodgings.</b>							
Number measured and registered	211	64	5	25	17	2	5
Total number now on register	325	300	288	265	279	222	209
Number of inspections by day	2,490	4,483	2,770	2,732	2,104	1,643	2,068
Number of inspections by night	8	—	—	—	—	—	—
Number of irregularities	113	321	111	176	170	108	91
Number of prosecutions	—	2	—	—	—	—	—
Amount of fines	—	£1 0 0	—	—	—	—	—
<b>5. Farmed-out Houses.</b>							
Number measured and registered	154	—	—	—	—	—	—
Total number now on register	398	368	368	368	368	368	263
Number of inspections by day	4,077	4,460	3,858	2,725	3,547	3,393	2,359
Number of inspections by night	—	—	—	—	—	—	—
Number of irregularities	683	936	889	308	493	113	26
Number of prosecutions	—	—	—	—	—	—	—
Amount of fine	—	—	—	—	—	—	—
<b>6. Ticketed Houses.</b>							
Number ticketed for first time	—	—	—	—	—	—	—
Total number now on register	6,450	5,398	4,354	5,340	3,797	6,733	5,213
Number of visits by day	—	17	—	—	—	—	—
Number of inspections by night	—	—	—	—	—	—	—
Number of cases of Overcrowding found and warned	—	—	—	—	—	—	—
Number of prosecutions	—	—	—	—	—	—	—
<b>7. Tents and Vans.</b>							
Number of inspections	746	1,033	450	898	857	662	496
Number of irregularities	4	7	9	6	7	13	3
Number of prosecutions	—	—	—	—	—	—	—
<b>8. Mech. Bakehouses.</b>							
Number measured and registered	10	5	5	6	2	1	2
Total number now on register	248	254	246	250	254	253	257
Number of inspections	1,051	1,175	1,025	904	1,052	974	1,029
Number dirty	105	147	139	135	139	142	134
Number Overcrowded	—	—	—	—	—	—	—
Number defective in light or ventilation	33	12	30	—	12	2	3
Number with sanitary convenience required	2	9	1	2	—	—	1
Number with sanitary fittings choked or defective	10	34	40	19	7	9	20
Number of other nuisances	113	78	58	21	44	36	40
Number of prosecutions	—	—	—	—	—	—	—

TABLE XVII.—Continued.

## OPERATIONS OF SANITARY SECTION—Continued.

	1939.	1940.	1941.	1942.	1943.	1944	1945.
<b>9. Non-Mech. Bakehouses.</b>							
Number measured and registered	13	9	3	9	71	2	1
Total number now on register ...	217	158	120	131	173	170	170
Number of inspections ... ..	719	831	606	652	850	621	662
Number dirty ... ..	41	55	39	32	51	36	21
Number overcrowded ... ..	—	—	—	—	—	—	—
Number defective in light or ventilation ... ..	7	2	1	—	—	—	1
Number with sanitary conveniences required ... ..	—	—	—	—	—	—	—
Number with sanitary fittings choked or defective ... ..	—	1	4	2	3	4	—
Number of other nuisances ...	39	24	15	13	19	5	5
Number of prosecutions ... ..	—	—	—	—	—	—	—
<b>10. Mech. Factories.</b>							
Number registered ... ..	146	158	76	101	96	123	117
Total number now on register ...	3,961	4,008	3,968	3,944	3,990	3,995	4,048
Number of inspections ... ..	8,829	9,816	7,638	8,302	7,618	6,747	6,534
Number with sanitary conveniences dirty ... ..	356	389	447	519	446	751	527
Number defective in light or ventilation ... ..	825	730	95	71	178	142	79
Number with sanitary conveniences required ... ..	149	255	66	74	32	22	13
Number with sanitary fittings choked or defective ... ..	150	245	183	256	358	296	286
Number of other nuisances ...	720	745	293	282	301	438	271
Number of prosecutions ... ..	—	1	—	—	—	—	—
Amount of Fine ... ..	—	£3 3 0	—	—	—	—	—
Other parts of factory—							
Number of other nuisances ...	194	94	59	61	71	62	45
<b>11. Non-Mech. Factories.</b>							
Number measured and registered	75	76	26	48	43	39	15
Total number now on register ...	2,609	2,292	2,064	1,955	1,890	1,841	1,817
Number of inspections ... ..	3,668	5,935	5,081	5,000	3,778	2,873	3,523
Number dirty ... ..	75	202	165	98	83	113	58
Number overcrowded ... ..	—	1	—	2	—	—	—
Number defective in light or ventilation ... ..	74	90	50	8	29	8	4
Number with sanitary conveniences required ... ..	7	15	5	8	2	—	3
Number with sanitary fittings choked or defective ... ..	16	52	26	17	31	14	17
Number of other nuisances ...	132	131	58	41	40	37	46
Number of prosecutions ... ..	—	—	—	—	—	—	—



TABLE XVII.—Continued

## OPERATIONS OF SANITARY SECTION—Continued.

	1939.	1940.	1941.	1942.	1943.	1944.	1945.
<b>12. Shops.</b>							
Number of inspections ... ..	4,042	4,002	5,326	4,500	2,465	3,241	1,863
Number dirty ... ..	80	113	79	139	41	52	48
Number defective in ventilation, temperature or lighting ... ..	282	60	37	22	6	10	4
Number with sanitary conven- iences required ... ..	27	8	6	9	3	1	13
Number with washing facilities required ... ..	1	—	2	—	—	1	—
Number with sanitary fittings choked or defective ... ..	36	64	39	27	40	43	41
Number of other nuisances ... ..	185	121	101	119	123	125	128
<b>13. Fish Restaurants.</b>							
Number of inspections ... ..	470	916	364	233	333	204	144
Number dirty ... ..	26	46	29	22	21	21	9
Number defective in light or ventilation ... ..	2	3	—	—	1	—	1
Number requiring sanitary con- veniences ... ..	—	1	—	—	—	—	—
Number with sanitary fittings choked, etc. ... ..	5	2	1	2	3	4	1
Number of other nuisances ... ..	24	25	21	11	24	19	16
<b>14. Offices.</b>							
Number of inspections ... ..	3,280	2,653	214	211	112	238	152
Number dirty ... ..	36	32	12	6	1	2	—
Number defective in light or ventilation ... ..	9	11	5	1	7	—	1
Number with sanitary conven- iences required ... ..	5	7	4	—	—	—	—
Number with washing facilities required ... ..	3	1	—	—	—	—	—
Number with sanitary fittings choked or defective ... ..	10	7	8	2	3	3	3
Number of other nuisances ... ..	38	14	8	4	6	5	3
<b>15. Homeworkers' Dwellings.</b>							
Total number now on register ... ..	167	149	112	82	47	50	36
Number of inspections ... ..	354	407	205	231	88	36	14
Number found dirty ... ..	—	—	—	—	—	—	—
<b>16. Bothies, Chaumers.</b>							
Number of inspections ... ..	—	61	—	8	14	11	12
Number dirty ... ..	—	—	—	2	—	1	—
Number of other nuisances ... ..	—	—	—	2	5	—	—

TABLE XVII. *Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	1939.	1940.	1941.	1942.	1943	1944.	1945
<b>17. Piggeries.</b>							
Total number now on register ...	59	60	61	70	72	67	63
Number of inspections ...	372	452	428	376	412	351	299
Number found dirty ...	43	39	54	41	35	21	13
Number of other nuisances ...	9	3	6	6	7	15	4
Number of prosecutions ...	—	—	—	—	—	—	—
<b>18. Offensive Trades.</b>							
Total number now on register ...	70	69	69	64	64	57	56
Number of inspections ...	1,168	1,170	809	722	600	700	786
Number of irregularities ...	49	61	19	47	37	32	17
Number of prosecutions ...	—	—	—	—	—	—	—
<b>19. Rag Flock Act, 1911.</b>							
Total number of visits ...	52	2	4	22	61	—	74
Samples submitted for analysis	12	—	1	2	6	—	11
Certified not to conform to standard ...	1	—	1	2	—	—	7
Number of prosecutions ...	—	—	1	1	—	—	—
Number of convictions ...	—	—	1	1	—	—	—
Amount of fines ...	—	—	£5 0 0	£3 0 0	—	—	—
<b>20. Broker's Premises.</b>							
Total number of visits ...	87	180	144	112	121	108	117
Number dirty ...	11	15	26	7	25	14	8
Number of other nuisances	5	12	16	8	5	11	9
<b>21. Cemeteries.</b>							
Total number of visits ...	149	78	68	84	77	48	26
<b>22. Military Billets.</b>							
Number of inspections ...	502	413	230	139	122	45	10
Number dirty ...	10	—	—	1	—	—	—
Number overcrowded ...	4	—	—	—	—	—	—
Number defective in light or ventilation ...	1	—	—	—	—	—	—
Number requiring sanitary conveniences or water supply ...	2	3	—	—	—	—	—
Number with sanitary fittings choked ...	7	7	2	—	2	—	—
Number of other nuisances ...	21	22	3	2	7	2	5

TABLE XVII.—Continued.

## OPERATIONS OF SANITARY SECTION—Continued.

	1939.	1940.	1941.	1942.	1943.	1944.	1945.
<b>23. Air Raid Shelters.</b>							
Number of inspections ...	—	—	27,175	13,625	2,934	587	629
Number dirty ...	—	—	65	158	47	1	5
Number defective in light or ventilation ...	—	—	2	10	—	—	—
Number with sanitary conveniences choked, etc. ...	—	—	87	99	4	—	2
Number of other nuisances ...	—	—	468	477	165	—	31
<b>24. Infectious Diseases, etc.</b>							
Infectious Diseases, visits ...	77,440	81,156	105,741	169,684	173,298	143,298	124,585
Pre admissions, Country Homes, visits ...	640	—	—	3	—	—	—
Vaccination visits ...	4,418	5,789	5,226	6,466	4,741	5,208	4,329
Institutional census ...	123	198	152	128	28	49	96
Air Raid Precautions visits ...	1,511	7,304	9,743	630	138	18	—
<b>25. Housing Acts.</b>							
Total number of visits ...	18,853	23,986	5,013	3,255	24,797	24,146	16,263
<b>26. Work of Female Inspectors.</b>							
Under the Glasgow Corporation (Police) Order, 1904—							
<i>(a) Verminous Children.</i>							
Number of visits to schools ...	790	832	1,413	1,379	1,291	1,271	1,378
Number of children submitted for inspection ...	16,719	54,664	75,030	84,455	85,463	89,197	91,720
Number of children found infested ...	279	471	668	560	949	806	857
Number of children found infected ...	3,924	17,202	21,425	19,108	18,758	17,219	18,515
Number of children found with fleas ...	155	150	431	488	901	386	351
Number of children found dirty ...	602	331	952	1,551	1,941	1,697	1,514
Number of written notices ...	496	493	687	426	998	851	992
Number of children cleaned by Guardians ...	2,035	1,945	11,266	9,283	11,494	12,494	11,285
Number of children cleaned by officers ...	—	2	31	175	485	206	98
Number of special visits ...	—	331	—	—	—	—	—
Number of children examined ...	—	30,367	—	—	—	—	—
Number of children re-inspected ...	—	—	37,841	41,297	51,987	53,976	52,728
Number of infectious diseases ...	—	—	—	—	1,170	714	624

TABLE XVII.—Continued.

## OPERATIONS OF SANITARY SECTION—Continued.

	1939.	1940.	1941.	1942.	1943.	1944.	1945.
<b>(b) Homes of Verminous Children.</b>							
Number of houses inspected ...	3,584	9,962	9,450	7,701	10,194	8,090	7,139
Number of houses in which lodgers were found ...	110	64	59	9	46	10	11
Number of houses found dirty	30	18	28	15	52	15	8
Number of houses with dirty bedding ...	37	22	19	9	32	18	9
Number of written notices ...	11	13	3	1	49	21	7
Number of re-inspections ...	290	290	1,059	196	278	218	429
Number of houses cleaned ...	29	13	31	18	50	17	9
Number of bedding cleaned ...	34	20	21	10	31	20	10
<b>(c) House-to-House Visitation.</b>							
Number of houses visited first time ...	2,139	1,598	1,463	1,127	619	2,700	2,644
Number of houses in which lodgers were found ...	54	18	17	5	34	56	61
Number of houses found dirty	49	29	29	28	42	47	50
Number of houses with dirty bedding ...	41	17	29	29	39	29	30
Number of houses—Written notices... ..	9	1	1	3	10	14	21
Number of houses—Re-visits...	125	144	143	164	339	249	273
Number of houses found cleaned	33	29	32	30	55	46	45
Number of houses—Bedding found cleaned ...	30	17	24	27	47	26	27
<b>(d) Re-housing Scheme Visitation.</b>							
Number of houses visited first time ...	64,086	49,348	41,990	42,340	60,779	67,301	66,465
Number of houses in which lodgers were found ...	1,139	1,211	1,282	891	2,064	2,599	2,660
Number of houses found clean	44,123	32,635	26,111	25,712	36,323	41,406	41,735
Number of houses found fair	18,378	15,306	14,683	15,540	23,047	24,614	23,545
Number of houses found unsatisfactory ...	1,457	1,298	1,075	840	—	—	—
Number of houses found dirty	128	109	121	248	1,409	1,281	1,185
Number of houses with dirty bedding ...	109	111	111	155	381	247	203
Number of written notices ...	53	56	76	177	1,092	1,295	1,238
Number of re-visits ...	2,815	2,559	2,060	1,807	3,136	3,051	2,569
Number of houses found cleaned	1,518	1,343	1,146	1,078	1,656	1,289	1,209
Number of bedding found cleaned ...	104	111	106	156	369	248	205

TABLE XVII.—*Continued.*OPERATIONS OF SANITARY SECTION—*Continued.*

	1939.	1940.	1941.	1942.	1943.	1944.	1945.
<i>(c) Intermediate Housing Scheme Visitation.</i>							
Number of houses visited ...	2,304	811	553	417	735	773	1,328
Number of houses in which lodgers were found ...	19	1	2	—	9	6	29
Number of houses found clean	1,906	667	453	281	428	426	908
Number of houses found fair...	340	114	76	111	277	321	394
Number of houses found unsatisfactory ...	50	25	16	16	—	—	—
Number of houses dirty ...	8	5	9	9	30	26	26
Number of houses with dirty bedding ...	2	3	3	5	17	19	15
Number of written notices ...	4	3	3	5	7	13	19
Number of re-visits ...	88	116	73	83	94	91	104
Number of houses found cleaned	45	31	27	28	33	26	32
Number of bedding found cleaned ...	4	4	3	5	10	19	15
Number of empty houses visited	341	290	230	139	141	149	88
<i>(c) Other Work.</i>							
Number of nuisances reported by Female Inspectors ...	306	120	33	56	299	232	32
Number of infectious disease cases reported by Female Inspectors ...	27	30	54	443	9	—	3

TABLE XVIII.—GLASGOW. POPULATION BIRTHS AND DEATHS; BIRTH RATES AND DEATH-RATES PER 1,000; ALSO DEATHS UNDER 1 YEAR, AND DEATH-RATES PER 1,000 BIRTHS SINCE 1861.

Year	Population	Births	Deaths	Birth-rate per 1,000	Death-rate per 1,000	Deaths under 1 Year	
						Number	Rate per 1,000 Births
1861 ...	397,673	16,537	10,936	41·6	27·5	2,544	154
1871 ...	491,900	18,867	15,790	38·4	32·1	3,608	191
1881 ...	512,034	19,106	12,916	37·3	25·2	2,745	144
1891 ...	567,143	19,857	14,324	35·0	25·3	2,946	148
1901 ...	761,925	24,206	16,197	31·8	21·2	3,607	149
1902 ...	762,789	24,722	15,532	32·4	20·4	3,206	129
1903 ...	763,654	25,135	15,073	32·9	19·7	3,663	146
1904 ...	764,521	24,754	15,414	32·4	20·2	3,606	146
1905 ...	765,389	24,316	14,460	31·8	18·9	3,195	131
1906 ...	780,192*	24,560	14,889	31·5	19·1	3,223	131
1907 ...	781,080	24,006	15,659	30·7	20·0	3,116	130
1908 ...	781,969	23,915	15,265	30·6	19·5	3,284	137
1909 ...	782,860	23,140	15,242	29·6	19·5	3,073	133
1910 ...	783,785	22,222	13,395	28·4	17·1	2,694	121
1911 ...	784,680	21,755	13,899	27·7	17·7	3,016	139
1912 ...	785,600	22,044	13,797	28·1	17·6	2,740	124
1913†...	1,021,789*	28,688	17,693	28·1	17·3	3,706	129
1914 ...	1,028,440	29,462	17,522	28·6	17·0	3,913	133
1915 ...	1,035,091	27,943	20,159	27·0	19·5	4,007	143
1916 ...	1,041,742	27,094	16,601	26·0	15·9	2,996	111
1917 ...	1,048,393	24,030	16,691	22·9	15·9	3,089	129
1918 ...	1,055,044	23,524	18,362	22·3	17·4	2,660	113
1919 ...	1,061,695	25,835	18,237	24·3	17·2	2,937	114
1920 ...	1,068,346	32,626	16,765	31·5	15·7	3,477	107
1921 ...	1,075,000	29,712	15,625	27·6	14·5	3,138	106
1922 ...	1,074,607	28,298	17,850	26·3	16·6	3,401	120
1923 ...	1,074,215	26,710	14,875	24·9	13·8	2,388	89
1924 ...	1,073,822	25,330	16,868	23·6	15·7	3,005	119
1925 ...	1,073,429	25,416	15,336	23·7	14·3	2,591	102
1926 ...	1,090,380*	24,541	15,731	22·7	14·6	2,548	104
1927 ...	1,089,988	23,578	15,439	21·6	14·2	2,527	107
1928 ...	1,089,595	23,649	15,701	21·7	14·4	2,525	107
1929 ...	1,089,202	22,799	17,760	20·9	16·3	2,438	107
1930 ...	1,088,810	23,322	15,455	21·4	14·2	2,355	101
1931 ...	1,088,461	22,926	15,505	21·1	14·2	2,397	105
1932 ...	1,095,263	22,732	16,071	20·8	14·7	2,542	112
1933 ...	1,103,357	21,361	14,747	19·4	13·4	2,061	96
1934 ...	1,115,590	21,822	15,234	19·6	13·7	2,140	98
1935 ...	1,119,414	22,102	15,537	19·7	13·9	2,169	98
1936 ...	1,119,600	22,273	16,406	19·9	14·7	2,429	109
1937 ...	1,119,863	22,176	16,379	19·8	14·6	2,313	104
1938 ...	1,127,825*	21,979	15,016	19·5	13·3	1,919	87
1939 ...	1,128,473	21,682	15,010	19·2	15·0	1,737	80
1940 ...	1,045,333†	20,965	17,603	19·1	16·8	1,983	95
1941 ...	1,045,333	20,365	16,301	18·5	15·6	2,267	111
1942 ...	1,045,333	20,615	14,679	18·8	14·0	1,863	90
1943 ...	1,045,333	22,363	14,824	20·3	14·2	1,825	82
1944 ...	1,050,000	22,203	14,603	20·2	13·9	2,108	95
1945 ...	1,050,000	20,294	13,941	19·3	13·3	1,379	68

\* Extended City.

‡ Births and Deaths from 1913 are corrected for transfers.

† Civilian population only, shown for the war years.

## PART II

### FEVER AND TUBERCULOSIS HOSPITALS.

During the year 13,496 cases were dismissed from the four fever hospitals. There were 759 deaths representing a gross mortality rate of 5·6 per cent. Although the gross mortality rate of a fever hospital varies considerably from year to year depending upon the distribution of the epidemic diseases admitted a rate of about 6 per cent. has been usual in the last few years. This should be compared with rates of between 9 and 10 per cent. which were the normal just about ten years ago. This reduction in mortality has several explanations, all of them encouraging. To begin with some diseases (e.g. measles) are undoubtedly less virulent than they were and one is tempted to think that improved nutrition may explain this. Another explanation is the tendency for the doctor to seek earlier admission for his cases, which thus receive specific treatment more early in the disease. Finally, and not least important, the great improvement in treatment brought about by the sulphonamides and penicillin cannot be under-estimated, for these have a place in the management of nearly all severe infections.

### STREPTOCOCCAL INFECTIONS.

It is now generally agreed that one organism (*S. pyogenes*) is capable of causing a variety of specific infections and it seems desirable to include the major diseases caused by it under the one heading.

(a) *Scarlet Fever*.—The total number of cases dealt with was 2,853, slightly more than in the previous year. Seven patients died, giving a fatality rate of 0·2 per cent. The average days residence in hospital for all cases was 30—a somewhat long period. In one of the hospitals an attempt was made to reduce this period considerably by treating all cases with specific antitoxin and dismissing the patient as soon as the medical condition warranted. The two reasons which contribute to a lengthy stay may be said to be, on the one hand, the fear of development of nephritis and, on the other hand, the development of pyogenic complications which may render the patient infective to others. So far as the first possibility is concerned, it can be stated

that no case of nephritis has occurred in this particular hospital during the last three years. It has seemed, therefore, unreasonable to detain patients in hospital for fear of a complication which only occurs about once in a thousand cases. Further, the longer the patient remains in hospital the more likely is he to develop a purulent complication which will further delay his dismissal. An analysis of the 277 cases treated at this hospital shows that the average days' residence was 16. Only 27 patients (10 per cent.) were detained in hospital for more than 28 days.

Last year, reference was made to the occurrence of otitis media as a complication of this disease. Out of the same total number of cases (277) the following are the figures for the present year:—

*Otitis media.*

(a) Catarrhal	present on admission	...	...	...	...	13
	developed in hospital	...	...	...	...	1
(b) Suppurative	present on admission	...	...	...	...	3
	exacerbation of chronic otitis developing after admission	...	...	...	...	2
	developed in hospital	...	...	...	...	1

These figures show that this complication need not be feared so much as it was, provided the case received adequate specific therapy on admission.

As a consequence of the early dismissal there was no increase in the rate of return cases.

(b) *Erysipelas*.—The ease with which this disease can usually be treated at home has resulted in a marked reduction in the numbers for whom hospital admission is sought. During the ten-year period prior to the war (1929-1938) the average annual admissions to hospital was 614. During 1945 only 253 cases were dealt with. The mortality (mainly in elderly patients with other complicating diseases) was low—namely 2.4 per cent.

(c) *Puerperal Fever*.—(Although it is not assumed that all of these cases are streptococcal in origin, this organism causes the largest single group so that it is convenient to deal with them in this section). Dr. Archibald has supplied the following summary.



The total number of cases dealt with was 241. For classification in the general statistical summary, septic abortions are included in puerperal fever figures, and certain complicated complete simple abortions appear with the puerperal pyrexia figures. Sixty-eight cases of simple incomplete abortion, 19 cases of simple complete abortion, and 13 cases of threatened abortion, as well as 21 cases comprising such conditions as normal puerperium, premature delivery, uterine haemorrhage, fibroid tumour, ovarian disease, parametritis, etc., appear in the statistical summary under "Others."

*Puerperal Fever.*—Of the 65 cases of puerperal fever, 11 of which were septic abortions, only 2 deaths occurred. This low mortality rate, approximately 3 per cent., is noteworthy. One death was due to *puerperal sepsis and yellow atrophy of liver*, and the other to *ruptured uterus and generalized peritonitis*.

By far the most common complication was *severe anaemia*. Next in order of frequency were *phlegmasia alba dolens*, *pyuria* and *mastitis*. Other conditions noted were tuberculosis, rheumatism, pneumonia, gallstones, pleurisy, pelvic peritonitis, puerperal scarlet fever, septicaemia and pelvic abscess.

*Treatment.*—Routinely, all cases received a full course of sulphathiazole, together with alkaline diuretics. Almost all cases received intramuscular ergometrine to help the uterus to involute normally. To combat the anaemia which was present, iron was usually sufficient, although in some of the severe cases liver therapy was required. Di-noestrol tablets proved of value in inhibiting lactation. Nine cases were given penicillin which was administered by three-hourly intramuscular injections of 15,000 unit doses.

*Puerperal Pyrexia.*—There were 55 cases, one of which proved fatal. The cause of death was *pneumonia and cardiac failure*. The commonest complications were *mastitis*, *anaemia* and *pyuria*; other conditions found included subinvolution, phlebitis, tuberculosis, bronchitis, pernicious anaemia, pneumonia, pleural effusion, rheumatism, tonsillitis, dysentery, perinephric abscess and pulmonary infarct.

*Treatment.*—Routinely, a full course of sulphathiazole, together with alkali was given. All suppurating breasts were incised and when necessary the patients were given penicillin locally and intramuscularly (500,000 units in all). Two cases of pernicious anaemia failed to respond to ordinary liver therapy and only yielded when large doses of a crude extract preparation was used, along with blood transfusion.

*Abortions.*—Approximately half the total cases dealt with were abortions, classified as follows:—

Threatened	...	...	...	13
Incomplete—simple	...	...	...	68
septic	...	...	...	5
Complete—simple	...	...	...	19
septic	...	...	...	6

*Complications.*—Severe anaemia was again the most frequent. Other conditions found were pyuria, septicaemia, peritonitis, parametritis, pelvic abscess, tuberculosis, pleurisy and sub-mucous fibroid.

*Treatment.*—Dilatation and curettage was performed under general anaesthesia in 94 cases. Sulphathiazole and potassium citrate and sodium bicarbonate were given routinely. Following operation, all cases received ergometrine. Blood transfusions were necessary in 10 cases. Penicillin was given by intermittent intramuscular injections to 7 cases. Appropriate treatment was given to anaemias. For patients suffering from shock during abortion, plasma and 20 per cent. dextrose saline were given intravenously in 8 cases.

#### DIPHTHERIA.

1,944 cases were dealt with and of these, 31 died, giving a mortality rate of 1.6 per cent. In 504 cases admitted as diphtheria the diagnosis was not confirmed giving an altered diagnosis rate of 20.6 per cent. *Gravis* infections have continued the most prevalent, although the proportion has been lower than in recent years. Diphtheria, usually of a mild nature, has been noted in a number of immunised persons. As was stressed in last year's report immunisation increases the possibility of the occurrence of minimal forms of the disease. There is still need for increased isolation accommodation for this type of case.

## MENINGOCOCCUS INFECTIONS.

In all, 634 patients were admitted with this diagnosis which was confirmed in only 136, or 22 per cent. This is almost the same total as last year. The mortality rate of 20·5 per cent. is very similar to that which has been obtained during recent years. Penicillin was used on a selected group of patients in one of the hospitals but did not produce results any better than the now standard treatment with one of the sulphonamides.

Meningitis due to other bacteria is, of course, frequently admitted to the wards which receive this disease. In some of these cases, there have been some striking results with penicillin, for example, in pneumococcal infections. Success, however, calls for unremitting effort, prolonged therapy and the co-operation of other specialities. Neuro-surgical assistance has been valuable in some of the cases. The largest single group of cases due to other organisms is, of course, that due to *B. tuberculosis*. It is to be regretted that there is still no remedy for this uniformly fatal disease.

## PNEUMONIA.

The notification of pneumonia was responsible for the admission of 3,159 cases, in 2,407 of which the diagnosis was confirmed. There were 213 deaths, giving a fatality rate of 8·8 per cent. In general sulphonamide treatment was used but a trial of penicillin in comparison with sulphathiazole was completed and published in the medical press during the year. The analysis of the results showed that there was little difference in the effect achieved by the two substances. In one particular aspect the results were interesting, namely, in the failure of penicillin to hasten the return of the lung to normal. A slow convalescence is now the rule in such cases and investigations continue in an effort to improve treatment in this respect.

It is not perhaps sufficiently appreciated that the notification of pneumonia has resulted in the admission of a wide variety of general medical conditions to the wards receiving such cases. Perhaps the largest single group is of pulmonary tuberculosis, and a recent analysis in one of the hospitals showed that no less than 10 per cent. of the cases admitted as pneumonia proved to have pulmonary tuberculosis. A particularly important form of this disease which often closely simulates

pneumonia in its earlier stages is pleurisy with effusion. These cases, since they often constitute an early form of tuberculous disease are worthy of particular care and require a long period of hospitalisation. The following brief analysis of 55 such cases is considered interesting enough to record.

(a) *Age-Distribution.*

Sex.	Age Group (years).						Total.
	-9	-14	-19	-24	-29	30+	
Male .....	5	11	14	5	1	2	38
Female ...	0	3	9	2	3	0	17
Both Sexes ...	5	14	23	7	4	2	55

The condition appears to be most frequent in the age-group between 10 and 20 years for 37 of the cases occurred therein. In a large proportion of the cases it was not possible to see a lung lesion in the radiograph although such probably existed. But the fact that the disease is so often seen in the young adolescent, whose resistance to tuberculosis is usually poorer, underlines the need for continued watchfulness in its management.

(b) *Bacteriological Examination.*

It is well-known that in few cases can *B.tuberculosis* be obtained in a direct examination of the effusion fluid, and most of the patients have no sputum. The following table, however, shows that in a high proportion of the cases examined the organism is present in the swallowed bronchial mucus if suitable means are taken to detect it, for in half of the cases examined *B.tuberculosis* was present in the fasting juices of the stomach. (These special examinations were made at the Central Laboratory by the City Bacteriologist).

	Direct microscopy.		Guinea-pig inoculation.	
	Positive <i>B. tuberculosis</i>	Negative	Positive <i>B. tuberculosis</i>	Negative
Pleural fluid ...	2	53	2	5
Gastric washings	0*	0*	10	9

\* Not done.

Such a finding is of importance for it shows that such cases are potentially dangerous to others in the ward not similarly infected. That these positive results are not merely transient in character has been shown in some cases by the isolation of the organism on several occasions from the same patient.

(c) *Duration till recovery*.—Two figures may be supplied to show how slowly recovery takes place. The rapidity of the sedimentation rate of the blood cells is generally regarded as an index of the activity or quiescence of a tuberculous infection. Thirty of the 55 cases achieved a normal rate before the end of the third month in hospital; but in no less than nine patients the rate was still above normal after five months. The rapidity of recovery in this respect seemed to be associated with age. Under 14 years the average time until a normal rate was obtained was 108 days; under the age of 20 years the average time was 84 days; whereas in those over 20 years the average was 62 days. These figures again suggest that the young adolescent is the patient in whom particular care is required.

The mean duration of stay in hospital was 136 days. Nine of the patients were retained for longer than 200 days.

Such cases, then, constitute a small but, none the less, important aspect of the work of a pneumonia ward. Sufficient has been said to suggest that this form of pulmonary disease requires a special form of control; that in general the patients are not suitable for ordinary sanatorium wards; and that their presence in ordinary pneumonia wards, besides holding up accommodation for acute disease, may endanger other patients by reason of their infectivity.

#### INFECTIONS OF THE BOWEL.

(a) *The Enteric Group*.—Only 46 cases were proved to be true infections, 18 cases of typhoid and 28 of paratyphoid. This figure is very similar to that recorded last year and there was no special feature which calls for comment.

(b) *Dysentery Group*.—A further rise in the number of cases dealt with can be recorded. This year the total was 1,116—an increase of 245 over the previous year. Although of low severity (fatality rate 1·2 per cent.) the condition was responsible for rather a long period of hospitalisation. Routine treatment was by sulphasuccidine, which, in the main, appeared successful in clearing the infection. Some

infections remained the most prevalent ; and indeed, it would hardly be too much to say that this disease is now endemic in the city and that the number of cases dealt with in hospital constitutes but a small proportion of the actual cases. The symptoms of Sonne infections are often of a trivial nature consisting of a short period of diarrhoea. In the absence of the true signs of dysentery bacteriological examination is not sought and such unrecognised cases probably form a large reservoir of infection.

#### VENEREAL DISEASES.

During the year under review, the study of chemotherapy with intravenous typhoid vaccines (referred to last year) was continued, and in 163 patient-sessions 1,200 hours of fever above 104°F. or 105°F. were given. Much work was done in an endeavour to perfect the technique, and in this connection the central laboratory co-operated in the serological examination of a large number of blood samples.

The cases dealt with were distributed as follows :—

(1) Complicated sulpha-resistant urethritis	... ..	44 cases
(In some of these patients hyperthermia appeared preferable to the use of penicillin).		
(2) Penicillin-resistant non-specific urethritis	... ..	3 cases
(3) Symptomatic neurosyphilis of all degrees	... ..	5 cases
(Each patient of this group had at least 50 hours of fever).		
(4) Inguinal bubo	... ..	12 cases

(It is interesting to record that two cases of intractable rheumatoid polyarthrititis which were referred from other hospitals were given this form of treatment with very substantial relief).

Penicillin, in dosage of 3 mega units, has been used in the treatment of early syphilis in arsenic-intolerant subjects.

The total number of cases treated in the Venereal Wards was 203 ; 73 were under 25 and 130 over 25 years of age. They were classified as follows :

*Syphilis—*

Primary D.G + W.R.—	...	...	...	...	9
Primary W.R. +	...	...	...	...	24
Secondary	...	...	...	...	18
Latent first year	..	..	..	..	1
All later stages	...	...	...	...	29

*Gonorrhoea—*

Acute	...	...	...	...	67
Chronic	...	...	...	...	7
Soft Chancre	...	...	...	...	13
Non-specific venereal infection	...	...	...	...	32
Other than venereal	...	...	...	...	3
					203

*Average duration of residence—*

Syphilis	...	...	...	...	30 days
Gonorrhoea	...	...	...	...	28 "
Soft Chancre	...	...	...	...	27 "
Non-specific V.D.	...	...	...	...	37 "
Other than V.D.	...	...	...	...	10 "
Mixed infections	...	...	...	...	13 "

## OTHER INFECTIOUS DISEASE.

Other diseases comprised a total of over 4,600 cases but no particular group calls for special comment. *Measles* showed a slight increase over the previous year but the prevalent form was not particularly severe and the use of sulphonamides and penicillin contributed to the low mortality rate of 1.9 per cent. The numbers for *whooping cough* on the other hand showed a reduction although here there was a slight increase in the mortality (11.7 per cent.).

As a result of the return of Service men from the Middle and Far East an occasional tropical disease makes its appearance. The following case of Murine Typhus presented some interesting features.

*T.H.*, a male of 27 years, was admitted on 23.6.45. He had returned from the campaign in Burma. On his way home he had travelled via Chittagong, Calcutta and Dulale. He left Calcutta on 17.5.45 and boarded his ship in Bombay on 26.5.45. He had begun to feel unwell on the 10.6.45 but did not take to bed until the 15.6.45. The main complaint was of intense headache.

The patient was moderately ill and showed a sparse, fading, but typical, typhus rash. There was marked conjunctivitis and generalised lymphoplasia. The spleen was palpable. There was marked tremor of the tongue. There was no evidence of a local sore to suggest "scrub" typhus. Examination of the blood for agglutinins showed a titre against *B. protus* OX19 of 1:2560. There was irregular pyrexia until 29.6.46, the 14th day of illness. The white blood cells were examined on three occasions with the following result:—

	Polymorphonuclear leucocytes.	Lymphocytes.	Monocytes.	Total.
23.6.45	65 per cent.	23 per cent.	12 per cent.	5,900
24.6.45	35 „	55 „	10 „	5,600
26.6.45	28 „	65 „	7 „	3,400

A specimen of blood serum was submitted to examination against the specific antigens of epidemic and murine typhus and gave an agglutination against the former of 1 : 640 and against the latter of 1 : 20,480. The case was thus proved to be a true typhus of the murine type which is conveyed by the rat flea. One of the interesting features was the assistance of the differential white cell count, the high proportion of monocytes being a suggestive point in the preliminary clinical examination.

During the year a pavilion of two wards was adapted at Belvidere for the treatment of tuberculosis.

*Laboratory work.*—The newer forms of treatment make increasing demands upon the laboratory and in each of the hospitals the laboratory work has increased in amount year by year. It is a pleasure, however, to record an ever-closer liaison with the Central Public Health Laboratory. During the whole of the present year the typing of diphtheria bacilli has been conducted centrally and the arrangements have worked smoothly. There has been no delay in the time taken for the reports to become available by reason of their transport to a central department, and the experience gained from this co-operation will no doubt be of value as the scheme expands. The City Bacteriologist has been available in a consultative capacity and his opinion has been sought upon varied bacteriological problems.



FEVER HOSPITALS.—STATEMENT OF CASES TREATED ACCORDING TO SEX DATA BASED ON DISMISSALS AND DEATHS FOR YEAR 1945.

	Admitted.		Dismissed.		Died.		M'tality Av. Residence.		Ages.		Dismissals & Deaths.		Ruchill.		Belvidere.		Knightswood.		Shieldhall.		
	M.	F.	M.	F.	M.	F.	per cent.	per cent.	—15	15+	Altered Diag-nosis.	Deaths.	Dis-missals.	Deaths.	Dis-missals.	Deaths.	Dis-missals.	Deaths.	Dis-missals.	Deaths.	
									—5												
Typhus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	12	3	13	3	1	1	11.1	76	17	1	17	31	11	—	—	—	—	—	—	—	—
Paratyphoid Fever	9	19	9	18	—	—	3.6	45	24	5	18	15	6	—	—	—	—	—	—	—	—
Continued and Undeclared Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	1,289	1,523	1,306	1,547	5	2	0.2	30	35	1,634	187	212	907	2	1,245	4	298	—	—	—	—
Diphtheria and Mem. Group	859	1,147	807	1,106	16	15	1.6	46	12	577	394	504	917	13	750	18	21	—	—	—	—
Erysipelas	91	134	93	154	1	5	2.4	15	10	6	231	73	208	6	—	—	—	—	—	—	—
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebrospinal Fever	92	44	72	36	20	8	20.5	33	6	74	14	48	498	61	41	7	4	—	—	—	—
Trachoma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliioencephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	4	3	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Primary Pneumonia	1,485	806	1,403	791	143	70	8.8	31	3	3	1	7	4	—	—	—	—	—	—	—	—
Acute Intestinal Pneumonia	20	6	17	6	1	1	8.0	27	11	969	382	1,056	752	920	648	52	399	—	—	—	—
Malaria	19	1	15	1	1	—	5.9	19	2	1	17	2	8	5	6	1	11	—	—	—	—
Dysentery	616	511	589	513	8	6	1.2	24	24	653	204	259	396	6	405	—	299	—	—	—	—
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis	83	67	71	38	16	10	16.7	51	58	24	30	101	—	72	18	7	29	—	—	—	—
Other forms of Tuberculosis	68	77	7	5	64	73	91.9	63	16	46	59	44	—	87	2	42	3	—	—	—	—
Measles	398	345	380	330	7	7	1.9	24	12	892	101	91	46	287	5	203	6	184	—	—	—
German Measles	83	31	84	33	—	—	—	15	17	17	31	69	16	23	63	6	28	—	—	—	—
Whooping Cough	86	91	86	95	11	13	11.7	46	13	183	20	2	27	46	8	32	6	57	—	—	—
Chickenpox	160	100	166	104	1	1	0.7	26	78	119	77	76	15	4	254	2	12	—	—	—	—
Mumps	82	27	84	27	—	—	0.9	23	41	6	6	100	6	31	28	1	47	—	—	—	—
Veneral Diseases	205	170	215	165	1	2	0.8	51	96	31	21	331	—	177	3	203	—	—	—	—	—
Babies with Mothers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
No apparent Disease	34	44	33	43	1	1	33.3	22	1	6	—	—	—	—	—	—	—	—	—	—	—
Others*	1,181	1,103	1,025	997	144	96	10.6	16	17	1,051	432	779	—	743	106	919	78	330	—	—	—
Influenza	36	15	36	16	—	—	—	16	16	3	22	27	—	10	33	8	—	—	—	—	—
Puerperal Pyrexia	55	6	54	6	—	—	—	30	2	—	55	5	—	—	54	1	—	—	—	—	—
Impetigo	3	6	3	6	—	—	—	22	—	8	1	—	—	—	—	—	—	—	—	—	—
Mothers with Babies	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pemphigus Neonatorum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Unclassified (Staff)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leprosy	1	—	—	—	—	—	—	32	13	—	—	—	—	12	15	9	—	—	—	—	—
Infective Jaundice	3	1	2	1	—	—	—	34	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6,920	6,454	6,523	6,214	442	317	5.6	32	16	5,398	4,047	4,031	2,550	4,878	371	5,042	231	1,781	116	1,036	41
Phthisis	418	510	333	434	87	57	15.8	137	102	36	86	789	—	696	105	3	2	68	—	—	—
Phthisis (Unclassified)	—	—	—	—	—	—	—	61	—	—	—	7	—	—	—	—	—	—	—	—	—

\* includes one case of Murine ("Scrub") Typhus

## ROBROYSTON HOSPITAL.

While the essential features of the work of the past year are given, the report is still presented in abbreviated form for reasons of economy.

*Accommodation and Staffing.*—It became increasingly obvious throughout the year that the whole question of accommodation was more than ever related to the evergrowing problem of procuring an adequate staff. The immensities of the difficulties under which the hospital administration has been labouring were increased greatly with the advent of smallpox in March, and as a direct result, it was found necessary to close the pavilion given over to patients admitted under Category 23 (see Gynaecology). A crisis was reached in September, when it was decided, as the only possible way of ensuring adequate nursing, to stop all admissions for a period, and to lower the number of beds available for tuberculosis. It cannot be said that this was other than a temporary measure and at the time of writing the staff continues to decrease. It is practically certain that the very unfavourable position that has arisen will again have to be reviewed in the near future. The existing conditions may be more clearly defined by pointing out that wards hitherto staffed by a total strength of 12 nurses are now in some instances worked by 7 nurses. It may soon prove necessary to lay down a definite ratio as between nurses and patients and to allow a fluctuation of admissions as the effective nursing strength rises or falls. Over all departments there were 193 beds unavailable, because of lack of staff, early in 1946; and the usual reserve was maintained for the nursing of smallpox whenever it might occur. Despite all difficulties, a total of 1,753 patients were discharged during the year at present being reviewed.

*Pulmonary Tuberculosis.*—The appended table gives some idea of the class of lesion treated throughout the year:—

	Total.	Died.
Lesions classified as early ... ..	58	2
Lesions classified as intermediate ...	104	3
Lesions classified as advanced ... ..	313	148
	<u>475</u>	<u>153</u>

The difficulties which present themselves in dealing with advanced pulmonary tuberculosis were discussed in the report for 1944. In the year to which this report relates, there was a slight overall increase in the number of patients dealt with, but a further rise in the number of advanced lesions treated, has to be recorded. It might be well to consider whether or not this mass of untreatable disease is not one deterrent to nurses joining the staff. Among these unfortunate people, active curative treatment is for the most part impossible, although a majority of the patients are only too anxious to accept any measure which will offer any chance of improving their health, even though only temporarily. Every opportunity was taken to employ the accepted surgical procedures. Artificial pneumothorax was tried in 151 instances, but in only two thirds was any degree of clinical success attained. Thoracoscopic examination was necessary on 69 occasions, and in 52 of these the pneumothorax was made more effective. Complications were few. Some form of thoracoplastic operation was undertaken in 86 instances, and a feature was the excellence of the results of the operation when undertaken in one stage. Phrenic nerve paralysis, as in the past, was regarded as a useful adjunct to other forms of collapse, as a measure to control contralateral disease or, more rarely, as the sole measure. Ninety-nine patients submitted to this operation. Other miscellaneous operations numbered 5, and brought the total number of thoracic operations to 258.

*Non-pulmonary Tuberculosis.*—The table given below not only gives a summary of the work done in non-pulmonary tuberculosis, but in addition gives some idea of the mass of the operative work done :

	Total.	Deaths.	Operation
Tuberculosis of spine ... ..	53	5	5
Tuberculosis of hip ... ..	21	2	3
Tuberculosis of bones other than spine ... ..	10	2	4
Tuberculosis of joints other than hip ... ..	29	—	19
Genitourinary tuberculosis ... ..	42	5	101
Abdominal tuberculosis ... ..	32	7	1
Tuberculosis of lymphatic nodes ... ..	6	—	4
Multiple and miscellaneous tuberculous lesions ... ..	11	2	4
Non-tuberculous disease or admitted for observation	17	—	14
Operations on thorax ... ..	See separate par.		259
Operations connected with puerperal sepsis ... ..	See separate par.		223
Operations in gynaeccology unit ... ..	See separate par.		92
Operations in Maternity Unit ... ..	See separate par.		41
Total ... ..	<u>221</u>	<u>23</u>	<u>770</u>

*Radiology.*—A major breakdown of the plant occurred in August, and owing to difficulties of replacement, there was serious delay in overtaking the necessary work. To some extent this gap was shortened by utilising a small portable unit. At the time of writing, all the necessary work has been done. The number of photographs taken was 3,861, of which 626 represented the work necessary to ensure the health of the staff.

*Puerperal Sepsis and pyrexia.*—The volume and scope of the work of this special unit is summarised below.

	Total.	Deaths.
(1) Puerperal sepsis following birth of a viable child ...	136	8
(2) Puerperal sepsis following birth of a non-viable child	130	3
(3) Abortions (non septic) and various related conditions	185	—
(4) Other diseases ... ..	46	3
Total ... ..	<u>497</u>	<u>14</u>

It will be noticed that the table shows a material difference from that presented at the end of 1944. The greatly increased total represented by lines 3 and 4 is due to a change in the type of patient admitted. Towards the end of 1945 it became the accepted policy of the Public Health Department to use a portion of the pavilion for the treatment of abortion and thereby relieve the results of the shortage of beds elsewhere. This has entailed a considerable increase in the work done, and great credit is due to the depleted nursing staff that no serious cross infection has taken place. The increase in the operative work is explained by what has already been said.

In the treatment of post partum sepsis there has been little change. Penicillin was used only in the most serious incidents and where there was clinical or bacteriological evidence that a drug of the sulphonamide group would prove of limited value. The inferred pessimism of the report for 1944 has not been wholly justified, for scrutiny of the case-records suggests that the overall mortality (lines 1 and 2) of 4 per cent. would have been higher but for the use of penicillin.

*Pneumonia.*—As before, a ward in the Emergency Hospital has been constantly in use for the treatment of pneumonia in females. The past year was rather less heavy than 1944, and a total of 251 patients was discharged. These may be classified as follows:—

	Total.	Deaths.
(1) Acute primary pneumonia ... ..	82	—
(2) Bronchopneumonia ... ..	21	3
(3) Pulmonary Tuberculosis ... ..	47	3
(4) Tuberculous Pleurisy ... ..	34	—
(5) Other respiratory diseases ... ..	31	—
(6) Various diseases ... ..	36	13
Total ... ..	<u>251</u>	<u>19</u>

It will be noticed that about one third of all those discharged suffered from tuberculosis, and it must be remembered that accommodation had to be found for a majority of these within the hospital. Of pneumonia itself, little need be said. Treatment was in a vast majority perfectly successful, and complications were practically absent.

*Gynaecological Unit.*—It has already been pointed out that, since a case of smallpox was admitted in March, it was found necessary to close the ward the following month. During the short time it was open, 129 patients were discharged and there were 92 operations; of these operations over 40 were undertaken for incomplete abortion for whom accommodation could not be found elsewhere.

*Maternity Unit.*—In pursuance of the increased demand for hospital accommodation for confinements a ward in the main hospital was reconditioned and suitably modified, and was opened on November 21st. The unit, which will be replaced by a larger block in the future, accommodates 36 mothers and has, in addition, cubicles for isolation. From its opening until December 31st, there were 99 live births and two stillbirths, one being a macerated premature foetus and the other being encephalic. There were two neonatal deaths, the first being due to spina bifida and the second due to congenital heart disease.

*Smallpox.*—One patient was admitted in the course of the year. He suffered from severe confluent smallpox, and recovered. In his recovery penicillin played a great part and the case was thought sufficiently outstanding to be reported elsewhere. Thirteen contacts were under observation at the same time.

## MEARNSKIRK HOSPITAL.

During 1945, following the cessation of hostilities in Europe, there was a decline in the number of patients, in all groups, admitted to the hospital. As would naturally be expected, the fall was most marked among service patients, the numbers admitted in this group being down by slightly over 2,000, i.e., from 6,722 in 1944 to 4,655 in 1945. Since the admission of civilians from the waiting list of city hospitals stopped in June 1944, very few civilian patients were admitted to E.M.S. beds. The fall in the number of E.M.S. patients was, unfortunately, accompanied by a corresponding fall in the number of nursing staff, so that even the release of E.M.S. beds, had this been possible would not have enabled the hospital to deal with increased numbers of tuberculous patients. The admissions in this group were however, only slightly lower than in 1944, 300 as against 339, and this slight fall is accounted for by the structural alterations taking place in one pavilion, undergoing conversion for use as a Chest Unit, which has resulted in a temporary slight reduction in the number of beds available. Thanks is due to the members of the nursing staff who despite the general shortage of tuberculosis nurses, carried on their work in the phthisis wards and by their steady application to duty overcame all difficulties encountered.

The total number of admissions and dismissals or deaths is shown in the following table :—

PATIENTS ADMITTED AND DISMISSED OR DIED IN HOSPITAL  
DURING 1945.

	Tuberculous Patients.	Service Patients.	Civilian Scheme Patients.	Total.
In residence at 1st January	353	381	1	735
Admitted during the year ...	300	4,655	11	4,966
Dismissed or died ... ..	342	4,827	12	5,181
In residence at 31st December	311	209	—	520

The conditions dealt with are shown in the following table of admissions :—

Tuberculosis ... ..	300
Ear, Nose and Throat Conditions ... ..	610
Eye Conditions ... ..	151
Medical and Surgical Conditions ... ..	3,905
Total ... ..	<u>4,966</u>

During the year, 1,792 out-patient attendances were recorded as follows :—

Tuberculous Patients	...	...	...	...	936
Ear, Nose and Throat Department	...	...	...	...	54
Eye Unit	...	...	...	...	73
Physiotherapy Department	...	...	...	...	227
Medical and Surgical Conditions	...	...	...	...	502
Total	...	...	...	...	<u>1,792</u>

No attempt will be made here to discuss the E.M.S. patients.

Of the 342 tuberculous patients who were dismissed or died in hospital, 263 had pulmonary tuberculosis and 79 had non-pulmonary lesions. Of the total, 225 completed the prescribed course of treatment and of these 140 were dismissed with the disease quiescent, 44 were much improved and 41 showed some improvement. Of the remaining 117 patients, 55 died, 54 were dismissed at their own request or at the request of relatives while 8 were transferred to other institutions with the disease still active. Of the deaths, 47 occurred in patients with advanced pulmonary disease. The remaining 8 occurred in patients with major non-pulmonary lesions. Of these 4 died from tuberculous meningitis, 1 from advanced caseating abdominal tuberculosis with intestinal obstruction, 1 spinal case with multiple sinuses from chronic toxæmia and amyloid disease, 1 spinal case with pulmonary tuberculosis from confluent bronchopneumonic phthisis, and 1 orthopaedic case from Still's disease with cardiac complications.

The average duration of residence for the tuberculous patients was 383 days.

As in former years the work of the hospital is summarised in the following brief account of the work of its main departments.

*Surgical Operations.*—With the decline in the number of service patients there was a corresponding fall in the amount of surgical work undertaken in the operation theatres. In all, 2,167 procedures were carried through and this total included 1,068 major operations, 310 minor operations, 632 theatre examinations (cystoscopy, proctoscopy, etc.) and 157 major surgical dressings. The types of operations and the category of the patients treated are shown in the following table :—

Operations.	Tuberculous Patients.	Service Patients.	Civilian Scheme Patients.	Staff.	Total.
<i>Major Operations—</i>					
Abdominal ... ..	1	226	—	—	227
Rectal ... ..	—	41	—	—	41
Genito-Urinary ... ..	1	77	—	—	78
Gynaecological ... ..	—	26	—	—	26
Orthopaedic ... ..	32	77	—	—	109
Ear, Nose and Throat	12	362	—	3	377
Ophthalmic ... ..	—	83	4	6	93
Thoracic ... ..	1	1	—	—	2
Miscellaneous ... ..	1	114	—	—	115
Total ... ..	48	1,007	4	9	1,068
<i>Other Procedures—</i>					
Minor Operations ... ..	28	268	—	14	310
Theatre Examinations	6	580	—	46	632
Theatre Dressings ... ..	27	130	—	—	157
Total ... ..	61	978	—	60	1,099
Grand total ... ..	109	1,985	4	69	2,167

Anaesthetics to the number of 1,363 were administered of which 462 were general, 224 were spinal and 677 were local. Of the total, 1,062 were for major operations. This is shown in the following table :

Anaesthetic.	Major Operations.	Minor Operations.	Theatre Examinations.	Theatre Dressings.	Total
<i>General—</i>					
Inhalation ... ..	297	75	3	9	384
Intravenous ... ..	18	57	2	1	78
Spinal ... ..	199	—	25	—	224
Local ... ..	548	104	25	—	677
Nil ... ..	—	74	577	147	798
Total ... ..	1,062	310	632	157	2,161

The theatre staff also undertook 1,072 minor operative procedures and surgical dressings in the treatment of out-patients and members of the staff.

*Plaster of Paris Work.*—In the plaster room 461 plaster splints were made. These included 26 spinal jackets, 55 hip spicae, 237 leg plasters, 139 arm plasters and 4 plaster beds. In addition 30 casts were made as a first stage in the construction of certamid or celluloid splints.



*Splint Department.* In this department splints and other orthopaedic appliances were made, repaired, or adjusted for civilian and service patients resident in hospital or attending as out-patients. During the year 128 new splints were constructed in certalmid, celluloid, vulcanised fibre, block leather, iron or steel. Boots were altered in 372 cases by raising or tilting the soles or by fitting metatarsal bars or T-straps. Treads were fitted to walking skates in 84 cases. Other orthopaedic appliances and fittings to the number of 159 were made and this figure included 51 pairs of crutches. Seven urgently required pieces of hospital equipment were turned out including 1 artificial pneumothorax apparatus and 2 irrigation stands. In addition, major orthopaedic apparatus was erected, dismantled or adjusted in 108 cases and 296 repairs to splints, boots and other appliances were carried out.

*X-Ray Department.*—In this department there was a fall in the number of in-patients sent for examination. There was however, a rise in the number of out-patients examined in all groups, and there was a very marked rise in the number of screen examinations made. In all, 4,664 in-patients, 680 out-patients and 492 members of staff were examined. Skiagraphs to the number of 11,151 were taken and 1,131 screen examinations were made. Of the patients, 1,632 were tuberculous subjects and of these 407 attended as out-patients. The total work carried out is shown in the following table :—

	Tuberculous Patients.	Scheme Patients.	Staff.	Total.
In-patients ... ..	1,225	3,439	485	5,149
Out-patients ... ..	407	273	7	687
Screenings ... ..	1,119	12	—	1,131
Skiagraphs ... ..	2,390	8,126	635	11,151

*Dental Department.*—The dentist visited the hospital weekly and examined 618 patients of whom 543 were tuberculous subjects. Of the total, 315 received dental treatment and of these 172 required extractions, 372 teeth being extracted, while 143 patients were treated conservatively. The anaesthetics used for the patients who had extractions were local in 147 cases and general in 25. Of the extractions 155 were carried out in the dental department and 17 in the wards. Of the 143 cases who received conservative treatment only, 2 had the treatment carried out in the wards. The conservative work consisted of 83 fillings in 66 patients, 54 dressings in 49 patients, 29 scalings in 28 patients. In two additional cases, artificial dentures were supplied. The work of the department is shown on the following table :—

	Number of Patients.	Examined	Treated.	EXTRACTIONS.			CONSERVATIVE TREATMENT			
				General Anaesthesia.	Local Anaesthesia.	Total.	Fillings.	Dressings.	Scalings.	Total.
Tuberculous Patients ...	543	278	265	24	125	149 (345)	63 (80)	41 (44)	12 (12)	116 (136)
Scheme Patients ...	75	25	50	1	22	23 (27)	3 (3)	8 (10)	16 (17)	27 (30)
Total ...	618	303	315	25	147	172 (372)	66 (83)	49 (54)	28 (29)	143 (166)

(In the above table the number of patients is shown. The figures in brackets indicate the number of extractions or treatments.)

*Laboratory.*—There was only a slight fall in the work undertaken by the laboratory staff. A total of 5,337 specimens were submitted for bacteriological or pathological investigation, as against 5,500 in 1944. Of the total, 3,903 or 73 per cent. were from service patients and 1,434 were from civilian patients. The great bulk of the specimens were for bacteriological examination.

*Physiotherapy Department.*—On 1st January, there were 103 patients undergoing physical treatment. During the year 831 new patients were accepted for treatment and 856 discharged, leaving 78 still under treatment on 31st December. Of the 934 patients who received treatment, 827 were service cases and the remaining 107 were tuberculous patients and members of the staff. In all, 33,216 treatments were given as follows :—Massage, 3,540 ; medical gymnastics, 18,005 ; medical electricity, 1,239 ; heat therapy, 9,480 ; ultra-violet ray therapy, 952.

*Education.*—During the year, 83 pupils were admitted to the school and 79 were discharged. The average number of scholars on the roll was 96.5 with an average attendance of 92.3. The children received half-time instruction in the subjects of the ordinary school curriculum. The work was entirely individual the scholars being bed patients and the ages in each class ranging from 5 to 16 years.

### PART III.

#### OUTDOOR MEDICAL SERVICES AND GENERAL HOSPITALS.

OUTDOOR MEDICAL SERVICES.—The following table shows the work done by the medical staff as compared with the three previous years :—

			Visits.	Consultations.
1942	...	...	35,821	113,841
1943	...	...	36,861	107,238
1944	...	...	35,517	100,380
1945	...	...	34,502	100,550

The total amount of service expressed in units was 189,666, as compared with 192,014 in 1944, a reduction of 1·7 per cent. The corresponding reduction in 1944 was 0·5 per cent. Of the total services rendered, 175,607 units represented the work of the medical officers on full-time service, a proportion of 92·6 per cent. (One consultation at a clinic is reckoned as 1 unit, one domiciliary visit  $2\frac{1}{2}$  units, and one session at a Welfare Department  $2\frac{1}{2}$  units).

The decline in the amount of work by the medical officers was very small as compared with the previous year, but for comparison, attention is drawn to the figures for the peak year of 1938, when the number of visits paid was 74,944 and there were 300,048 consultations at clinics. The total number of units of service was 488,402. The decline in the amount of work, as represented by units of service, from the peak figure in 1938 to that of the present year has been brought about by the diminishing numbers in receipt of poor law relief, but it is fair to state that during 1938 the pressure of work and the overcrowding at the clinics were excessive, and also that the number of full-time medical officers has declined from 31 to 22.

One of the principal difficulties confronting the service was the insufficiency of hospital accommodation, and a waiting list had to be established. Supervision of this waiting list and the assessment of priority for admission are duties undertaken by the Outdoor Medical Officers and the nursing staff.

GENERAL HOSPITALS.—The following table shows the average daily number of patients in residence in the four general hospitals and the highest and lowest numbers :—

	Stobhill.	Eastern District.	Western District.	Southern General.
Average daily number in residence in 1945	1,435	283	242	794
Highest number in residence in 1945	1,562	327	290	1,040
Lowest number in residence in 1945	1,301	243	193	710
Residence on 31st December, 1945	1,301	264	210	743

On 31st December, 1944, the number of patients in residence in hospital was 2,796, whereas the corresponding figure at the end of 1945 was 2,518. The number of admissions in 1945 was 32,766, which was 2,367 less than the admissions during the previous year. The last pre-war figure was 28,192 in 1938.

A scrutiny of the hospital statistics since 1931 shows an almost continuous rise in the number of admissions, the only interruption in this rise being in 1938 and the three following years when a considerable number of beds were reserved for casualties. Even during these years, however, the numbers of admissions were not greatly reduced. In 1932 there were 27,052 admissions, and in 1944, 35,133. The reduction in the admissions during 1945 as compared with 1944 can be ascribed to a shortage of nursing staff.

The proportion of deaths occurring in hospital for many years averaged between 13 and 14 per cent., and in 1945 it was 9.5 per cent.

The average days' residence of patients has also been reduced in the past eleven years from 37.44 to 30.42, indicating increased activity in examination, diagnosis and treatment.

At the end of the year out of a total of 2,518 patients in the four general hospitals, there were only 62 Service and 34 E.M.S. Scheme cases. In addition to the accommodation in the four general hospitals, Corporation patients were also treated at Gartloch and Lennox Castle Institutions. At the end of the year there were 136 such patients in Gartloch and 157 in Lennox Castle. But for the additional accommodation provided in these two institutions the waiting list position would have become unmanageable.

It will be observed that the number of cases delivered in the four general hospitals during the year was 5,388 as against 5,104 in 1944. The Maternity Unit at Lennox Castle, however, was in full working order and during the year there were 1,055 births in that institution.

STOBHILL, EASTERN, AND WESTERN DISTRICT HOSPITALS.—

Stobhill is still part of the Emergency Hospital Scheme and retains Government beds for emergency use. There were 35 Service and E.M.S. patients under treatment at the end of the year, but otherwise the hospital was occupied by ordinary civilian cases.

*Staff—Medical.*—The recruitment of young medical officers for the Forces continued as before, but the staff generally was kept up to strength. Male resident officers are not usually permitted to engage for a second or third term of six months.

*Out-Patient Department.*—The Out-Patient Departments continue to expand and below is a table showing the number of patients who were treated at the three hospitals :—

	Stobhill.	Eastern District.	Western District.
Number of cases attending as Out-Patients	8,269	7,971	11,197
Number of Attendances	16,825	19,023	35,837

*Dental Treatment.*—No change is to be noted in the provision of dental treatment for both out-patients and in-patients.

*Pathological and Biochemical Laboratories.*—The following table shows the work of these laboratories :—

Autopsies	371
Histological Reports	748
Biological Tests	67
Bacteriological and Serological Reports	10,432
Wassermann Reactions	5,853
Kahn Tests	708
Colloidal Gold Tests	189
Grouping Tests for Blood Transfusion Service	1,602

BIOCHEMICAL DEPARTMENT.

Biochemical Analyses	11,914
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*Refereeing of Cases.*—The Board of Referees examined 470 cases, an average of 9 per week.

*Electro-Medical Departments.*—The following table shows the work of the Electro-Medical Departments :—

	Stobhill.	Eastern District.	Western District.
Number of Radiographic Films taken ...	16,529	325	5 703
Number of Barium Meals ... ..	1,089	—	115
Number of Deep Therapy Treatments ...	4,273	—	—
Number of Cases treated by Radium ...	47	—	—
Number of Sunlight Treatments given ...	481	1 713	3 694
Number of Cases treated by Massage ...	2,432	175	660
Number of Massage Treatments given ...	20,815	4,373	6 501
Number of Cases treated by electricity ...	363	124	139
Number of Electrical Treatments given ...	6,840	2,047	2 383
Number of Electrocardiographs ... ..	26	124	7

The total number of radiographic films taken at the three hospitals was 22,557 compared with 23,846 for the previous year.

*SOUTHERN GENERAL HOSPITAL.*—The daily number of patients in residence and the highest and lowest figures for 1944 are shown on page 198.

*Out-Patients.*—Out-Patient attendances numbered 41,185 with 45,046 in the previous year. The following table shows the work in more detail :—

REPORT OF PATIENTS AND ATTENDANCES AT OUT-PATIENT DEPARTMENT FOR YEAR ENDED 31ST DECEMBER, 1945.

	Persons Attended.	Total Attendances.
Medical and Surgical ... ..	3,321	17,890
Nervous Diseases ... ..	95	741
Skin Diseases ... ..	1,469	4 454
Diabetes ... ..	39	586
Ear, Nose and Throat ... ..	880	1,932
Ante-Natal ... ..	605	1,910
Post-Natal ... ..	566	1,175
Diseases of Women ... ..	308	736
Dental ... ..	234	1,153
X-Ray Treatment ... ..	4,468	4,468
Massage Treatment ... ..	407	5,161
Light Treatment ... ..	184	740
Eye Treatment ... ..	129	239
	<u>12,705</u>	<u>41,185</u>

*Surgical Department.*—Operations under general or spinal anaesthesia numbered 2,781 as compared with 3,420 in the previous year.

*X-Ray Department.*—The following table shows the amount of work done in the X-Ray Department :—

Number of patients X-rayed ... ..	9,295
Number of Films used ... ..	19,299
Number of Barium Examinations ... ..	830
Number of Screen Examinations ... ..	1,687
Number of Deep Therapy Treatments ... ..	2,170
Number of Sunlight Treatments ... ..	2,828

The number of X-ray films used was 19,299, as compared with 19,480 in 1944. In addition there were large numbers of barium investigations carried out. Treatments numbering 2,170 by deep X-ray therapy were given.

### OBSTETRICAL WORK IN THE GENERAL HOSPITALS.

The number of cases delivered in hospital has shown an increase from 5,104 in 1944 to 5,388 in 1945. The following table summarises the work of the Obstetrical Departments in the four general hospitals :

	Stobhill Hospital.	Eastern District Hospital.	Western District Hospital.	Southern General Hospital.	Total.
<i>Cases delivered in hospitals—</i>					
Dismissed well ... ..	1,806	725	905	1,435	4,871
Died ... ..	16	—	2	7	25
Transferred ... ..	226	29	74	163	492
Total dismissals of Cases which were delivered in Hospital ...	<u>2,048</u>	<u>754</u>	<u>981</u>	<u>1,605</u>	<u>5,388</u>
<i>Method of Admission of above Cases—</i>					
Admitted during Ante-Natal period for treatment and delivered in hospital ... ..	41	7	9	16	73
Admitted to Labour Ward ... ..	1,985	746	972	1,586	5,289
Admitted to Labour Ward (via Glasgow Royal Maternity Hospital) ... ..	22	1	—	3	26
Total ... ..	<u>2,048</u>	<u>754</u>	<u>981</u>	<u>1,605</u>	<u>5,388</u>
Cases admitted during Ante- Natal period—Dismissed un- delivered ... ..	<u>306</u>	<u>118</u>	<u>121</u>	<u>369</u>	<u>914</u>
Cases admitted after delivery	<u>137</u>	<u>1</u>	<u>5</u>	<u>63</u>	<u>206</u>
Abortions and Miscarriages ... ..	<u>627</u>	<u>71</u>	<u>62</u>	<u>513</u>	<u>1,273</u>
Infants dismissed alive ... ..	1,887	710	883	1,511	4,991
Infants still-born ... ..	105	21	39	61	226
Infants Neo-Natal Deaths ... ..	95	24	69	67	255
Total ... ..	<u>2,087</u>	<u>755</u>	<u>991</u>	<u>1,639</u>	<u>5,472</u>

The incidence of puerperal morbidity and mortality is shown in the following table :—

Hospital.	No. of Cases.		Cases per 1,000 Births.		No. of Deaths.		Deaths per 1,000 Births.		Case Mortality %
	Fever.	Pyrexia	Fever.	Pyrexia.	Fever.	Non-Septic.	Fever.	Septic.	Fever
Stobhill ... ..	8	4	3·8	1·9	4	20	1·9	9·5	50·0
Eastern District	6	7	7·9	9·2	2	1	2·6	1·3	33·3
Western District	5	7	4·9	6·9	2	2	2·0	2·0	40·0
Southern General	9	17	5·3	10·1	2	9	1·2	5·3	22·2
Total ... ..	<u>28</u>	<u>35</u>	<u>5·0</u>	<u>6·3</u>	<u>10</u>	<u>32</u>	<u>1·8</u>	<u>5·8</u>	<u>35·7</u>

The number of deaths associated with the Obstetrical Departments was 45 as compared with 56 in the previous year. The death rate per 1,000 births was 7·6 compared with 9·8 and the death-rate from puerperal sepsis increased from 1·1 to 1·8.

#### DIABETES—SUPPLY OF INSULIN.

Supplies of insulin are given to persons whose circumstances warrant such assistance and who are not already provided for under the National Insurance Scheme or Public Assistance.

The following statement summarises the changes in the Roll during 1945 :—

Cases on the Roll at 31st December, 1944	...	...	...	289
Cases applying for the first time during 1945	...	...	100	
Cases who discontinued treatment prior to 31st December, 1944, but reapplied during 1945	...	...	22	
			<u>122</u>	411
Cases who died during 1945	...	...	45	
Cases who discontinued treatment during 1945	...	...	36	
			<u>81</u>	330
Leaving cases on the Roll at 31st December, 1945	...	...		<u>330</u>

Of the 100 new cases applying for the first time during 1945, 58 were married women and 28 widows. Ten were outwith the National Insurance Scheme and four were children under 16 years of age.

The 36 cases who discontinued were visited, and the following reasons were given for discontinuance :—



Gone away, not found at address given ... ..	6
Discontinued on medical advice ... ..	8
Discontinued of own accord ... ..	15
In hospital ... ..	2
Obtaining supplies elsewhere (per P.A.D., N.H.I., etc.)	5
	<hr/>
	36
	<hr/>

Of the 330 cases on the Roll at 31st December, 1945, 29 are males and 301 females.

The preponderance of married women on the Roll is still maintained at 67 per cent.

Married women ... ..	220
Widows ... ..	62
Unmarried women ... ..	15
Uninsured males ... ..	19
Children under 16 years ... ..	14
	<hr/>
	330
	<hr/>

The age distribution is as follows :—

Under 10 years ... ..	5
"  20 " ... ..	14
"  30 " ... ..	11
"  40 " ... ..	17
"  50 " ... ..	43
"  60 " ... ..	101
"  70 " ... ..	111
"  80 " ... ..	23
80 and over ... ..	1
Not stated ... ..	4
	<hr/>
	330
	<hr/>

The various types of insulin issued to these 330 cases are :—

Ordinary Strength (20 units per c.c.) ... ..	40 (8)
Double Strength (40 units per c.c.) ... ..	53 (17)
Extra Double Strength (80 units per c.c.) ... ..	43 (31)
Protamine Zinc (40 units per c.c.) ... ..	161
Protamine Zinc (80 units per c.c.) ... ..	19
Globin (40 units per c.c.) ... ..	8
Globin (80 units per c.c.) ... ..	6
	<hr/>
	330
	<hr/>

The figures in brackets indicate the number of cases using these insulins in combination with one or other of the Protamine insulins or with Globin.

	1943	1944	1945
Amount of Insulin supplied by the Central Drug Store (No. of phials) ... ..	18,080	19,555	21,231
Cost (including syringes, repairs, and needles)	£1,882	£1,691	£1,797

The increased use of the more potent insulin continues.

	1943	1944	1945
Ordinary Strength (20) ... ..	5,070	4,885	3,936
Double Strength (40) ... ..	4,788	4,636	4,896
Extra Double Strength (80) ... ..	616	637	1,298
Protamine Zinc (40) ... ..	5,927	7,283	8,517
Protamine Zinc (80) ... ..	1,593	1,765	2,082
Globin (40) ... ..	—	63	204
Globin (80) ... ..	86	286	298
	<u>18,080</u>	<u>19,555</u>	<u>21,231</u>

## PART IV.

### MENTAL SERVICES.

Overcrowding and shortage of nursing staffs have continued to be the most pressing problems in the administration of the Mental Hospitals and Certified Institutions throughout the year. Great difficulty has been experienced in all the institutions in maintaining sufficient staff to ensure the safety and welfare of the patients and the long continued strain of working short-handed in overcrowded wards militates against the health and efficient working of the staff and is detrimental to the welfare of the patients. Little improvement can be looked for in this direction until more nurses become available. In spite of improvements in wages and conditions of service recruitment of nurses entering the service has been small. Every effort has been made to explore all possible channels of recruitment but the response has been poor and it has not been possible to utilise the empty wards at Woodilee and Gartloch. All the occupied wards are overcrowded and great difficulty has been experienced in finding accommodation in the mental hospitals for urgent cases of insanity.

Now that hostilities have ceased and large numbers of personnel are being demobilised from the services it is hoped that many more girls may be attracted by the improved conditions of service to take up mental nursing as a career. Until this occurs, no great improvement can be looked for.

Consequent upon the difficulty of obtaining beds in the mental hospitals the psychiatric units in the general hospitals have continued to be heavily handicapped through overcrowding and have had to retain many cases who should have been certified and removed to mental hospitals. The retention of these cases in the psychiatric units is detrimental to the treatment of psychoneurotics and early incipient cases of mental disorder for the treatment of whom the units were originally established. Throughout the year there has been a long waiting list of patients recommended for admission to the psychiatric units. These have had to remain at home under the regular supervision of health visitors who report on their progress or on the development of any untoward symptoms necessitating their removal to hospital as a matter of urgency.

Although the number of certified cases admitted during the year shows a decrease of 25 on last year's figures, no useful conclusion relative to the incidence of mental disease can be drawn from this fact as, had accommodation in the mental hospitals been available, more patients would have been admitted.

Modern forms of treatment continue to be utilised in all the mental hospitals with satisfactory results considering the types of patients admitted to them. As a large proportion of the cases admitted to these hospitals had already failed to respond to treatment in the psychiatric units of the general hospitals, most of whom were of the more difficult type or were suffering from more chronic forms of mental disorder their chances or recovery were correspondingly lessened. It is to the credit of the mental hospitals that such a satisfactory recovery rate is maintained year after year despite the less hopeful nature of the cases admitted. Electric convulsant therapy, hydrotherapy, pyrotherapy and other modern forms of treatment, including the use of malaria in the treatment of general paralysis, continued to be employed in the hospitals during the year.

Dr. A. M. Dryden, Medical Superintendent of Gartloch Mental Hospital reports as follows :—

“ At the beginning of the war, Gartloch Mental Hospital was taken over by the Department of Health for Scotland for use as an Emergency Hospital, the patients being evacuated to other mental hospitals in the area. The year 1945 witnessed the dissolution of the Emergency Hospital, which received its first patient on the 8th January, 1940, and the commencement of the restoration of the hospital to its normal functions. In July, 1945, the remaining Service personnel were transferred to other hospitals in the Western Area, and in August the patients evacuated from the London Hospitals to this institution owing to the flying bomb menace, were returned to their hospitals of origin.

In September 1945 the psychoneurotic unit of the Emergency Hospital containing both Scheme and Corporation patients was dispersed, the Scheme patients being transferred to Law Junction Hospital and the early mental observation cases, who were considered suitable for further observation, transferred to the psychiatric unit of Stobhill Hospital. The remaining patients in the unit were certified and admitted to the Hospital Section of the institution, which had largely been restored to its original condition.

On the 21st September, 1945, 17 male patients and 17 female patients, the remainder of those who had been evacuated to Gartnavel Hospital in August, 1939, immediately prior to the outbreak of war, were re-admitted, and in November and December 12 males and 6 females were re-admitted from Hawkhead Mental Hospital. Later 4 female patients were received from the mental wards of Old Monkland Poorhouse. These patients had originally been evacuated to Lochgilphead Mental Hospital.

By the end of the year it had been possible to open only five of the eight available wards in the Hospital Section—three wards staffed by male and two by female nurses. This was entirely due to dearth of nursing staff. During the last months of the year a few of our own male nurses became available on demobilisation from the Services and their numbers were augmented to a slight extent by the recruitment as student male nurses of a few demobilised ex-Service personnel. Despite repeated and widespread advertising in both Scotland and Ireland, the response to the call for female student nurses was most disappointing, and so far, the women demobilised from the three women's Services do not appear to be attracted to this type of work, despite the excellent pay and conditions."

Considerable alterations will be necessary before the Asylum Blocks at Gartloch can be utilised for their original function but this work is being proceeded with as quickly as possible.

It was not found possible to regain possession of Lennox Castle Certified Institution for its original function owing to the difficulty of finding other accommodation for the patients housed in the portion taken over as an Emergency Hospital at the beginning of the war.

*Admissions, Discharges and Deaths.*—The number of certified cases admitted to the mental hospitals during the year was 331, a decrease of 25 on the number admitted during the previous year. Many cases of certifiable mental disorder remain in the psychiatric units of the general hospitals owing to the lack of available accommodation in the mental hospitals.

There were 3,354 patients under care in the mental hospitals during the year, as compared with 3,177 during the previous year; the number remaining in the Corporation Mental Hospitals on 31st December, 1945, was 2,905 as compared with 2,822 on the corresponding date in 1944.

These figures do not include 109 Smithston cases boarded temporarily in Gartloch by the Renfrewshire Authority when Smithston was taken over during the war by the Canadian Government as a naval hospital.

The number of patients discharged recovered was 120, of whom 74 were from Hawkhead. This number shows a slight increase over the figure for the previous year, when the number was 109, and is a fairly satisfactory result considering the types of patients admitted. During the year 95 cases of Schizophrenia, 4 cases of Paranoia, 29 cases of Senile Dementia and 8 cases of General Paralysis were admitted, all of which forms of disorder are of less hopeful outlook than the Manic-Depressive and Confusional types of insanity, of which 74 cases were admitted.

Owing to the absence of any serious epidemics and to the general good health of the community, the death rate was again a low one in the mental hospitals, being the lowest ever recorded since the Corporation took over these institutions in 1930. The number of patients who died was 137 and of these, more than fifty-three per cent. were over the age of sixty years. As in previous years the commonest causes of death were cardio-vascular degeneration, respiratory diseases and senile degeneration.

Of the patients discharged recovered, the great majority were discharged within two years of admission; thus 69 per cent. were discharged within one year, 15 per cent. after one year and within two years, 8.5 per cent. after two years and within five years, and 7.5 per cent. after residence of more than five years. Nine patients were discharged recovered after continuous residence of more than five years. The opposite tendency is seen in the patients who died, of whom upwards of 60 per cent. had been resident for more than five years.

The causative factors in the production of mental disorders are extremely difficult to determine with any degree of accuracy. Constitutional and environmental factors both play an important part. In the cases admitted during the year the assigned cause in approximately 28 per cent. was constitutional inferiority, while mental stress and senility accounted for the breakdown in many of the admissions. In less than 1.5 per cent. was the breakdown attributed to war strain. Alcohol was considered to be the main causative factor in thirty-one cases. There is no direct evidence to show that war conditions have materially increased the incidence of insanity amongst the civil population.

*Patients in Other Institutions.*—At 31st December, 1945, there were 517 Glasgow patients boarded out in institutions owned by other authorities, an increase of 21 over the number at the corresponding date in 1944. This figure does not include the patients transferred from Gartloch to Gartnavel and Lochgilphead on the outbreak of war in 1939.

*Admission of Lunatics from H.M. Prisons.*—There was a very marked increase in the number of "Fiscal Cases" admitted during the year; 112 of these cases (92 men and 20 women) were admitted as compared with 80 during the previous year. The large number of these "Fiscal Cases" causes considerable strain and embarrassment in the administration of the mental hospitals owing to the restrictions necessarily imposed in the care and supervision of this difficult type of patient. Other ordinary patients housed along with them suffer through these restrictions and resent being treated alongside the "Fiscal" cases, with the result that an ever-increasing strain is thrown on the nursing staff. No relief can be looked for until the State Institution at Carstairs reverts to its proper function. The General Board of Control for Scotland and, through them, the War Department have been approached with a view to expediting the release of the State Institution as soon as possible.

*Licensed Wards in Southern General Hospital.*—The 389 beds provided in these wards continued to be used to their full capacity during the year. The accommodation set aside in them for the treatment of illness and infirmity amongst the patients, most of whom are of the ambulatory type, has continued to serve a useful purpose in obviating the transfer of such cases to the hospital wards of the mental hospitals which are already taxed to their full capacity.

*Dental Services in the Mental Hospitals and Certified Institutions.*—Mr. John Kyd, L.D.S., the dental surgeon to the mental institutions carried out the following treatments during the year; 1,677 patients were examined, including 9 who refused treatment; 1,757 extractions; 56 fillings; 22 dressings; 11 scalings; 153 dentures supplied; 1 denture remodelled and 122 dentures repaired. The general health and well-being of the patients has been greatly improved by the care and attention given to the mouths and teeth of the patients.

## CERTIFIED INSTITUTIONS FOR MENTAL DEFECTIVES.

LENNOX CASTLE.—The number of certified mental defectives on the register of this institution at the end of the year was 1,310, an increase of 18 compared with the previous year ; 103 cases were admitted ; 63 cases were discharged and 32 patients died during the year. Of the admissions, 60 came from their own homes, 18 from other certified institutions, 20 from other hospitals and institutions, one from an approved school and 4 from H.M. Prisons. Of the discharges, 32 patients were discharged to the care of friends, 27 on expiry of certificate and 4 were transferred to other certified institutions.

The high proportion of dangerous and criminal defectives admitted under Sections 9 and 10 of the Mental Deficiency and Lunacy (Scotland) Act, 1913, continues to add to the difficulties of administration of the institution already embarrassed by shortage of staff and overcrowding. It is hoped that this difficulty will be relieved to some extent when the State Institution at Carstairs is released by the War Department and becomes available for defectives.

Difficulty was experienced during the year in obtaining the services of suitable teachers for the juvenile delinquent defectives but this has now been overcome and the training of these difficult boys has continued on a high standard and is meeting with a good response from the boys who continue to show great improvement in their general behaviour and physical condition.

Difficulties in connection with the supply of materials continued to restrict the work of the occupational therapy departments of the institution but towards the end of the year there was a slight improvement in this direction. As war time restrictions gradually disappear it is to be hoped that materials will become more easily obtainable and the departments will be able to resume their full activities.

In this institution as in most other institutions throughout the country, great difficulty was experienced in maintaining an adequate staff of nurses.



The administration of the institution was severely handicapped during the latter months of the year owing to the absence from duty through severe illness of the Medical Superintendent and the sudden death in August of Dr. Rouppert, Senior Resident Assistant Medical Officer. Dr. Rouppert was a man of great ability and was well liked by both patients and staff.

CALDWELL HOUSE CERTIFIED INSTITUTION. —Miss Young, Superintendent, reports as follows :—On 31st December, 1945, the number of patients was 125—81 male and 44 female ; 12 patients were admitted (11 boys and one girls) ; nine boys and one girl were admitted from their own homes and two boys from Castlemilk Home, Rutherglen ; three boys and four girls were transferred to Lennox Castle Certified Institution on attaining the age of 16 years ; one boy was certified and transferred to Hawkhead Mental Hospital ; three boys and one girl died.

During the last few months there has been difficulty in maintaining an adequate staff of nurses.

In September a class of the younger girls was formed in the sewing room and superintended by the sewing maids. To begin with none of the children could sew but, due to the patience and interest of their teachers they were able to sell goods, such as dolls, cushion covers and work bags to the value of £10 1s. 6d. at Christmas. Their work continues to improve.

#### PSYCHIATRIC UNITS IN THE GENERAL HOSPITALS.

During the year the number of admissions to the psychiatric units of the general hospitals was 1,560 and the total number of cases treated was 1,944. These figures compare with 1,833 and 2,211 respectively for the previous year. The decrease in the number of admissions was almost entirely due to difficulty of obtaining beds in the mental hospitals for patients who should have been removed there.

Of the 1,944 cases treated in the general hospitals, 1,026 (53 per cent.) were sufficiently recovered to be sent home or, where they had no home, to an institution under the Welfare Department ; 342 patients died (17·6 per cent.), the majority of whom were old people suffering from senile dementia ; 175 (9 per cent.) were certified and transferred to mental hospitals or certified institutions for further treatment.

Overcrowding has continued to be very marked, particularly on the female side, where the demand for beds for cases of senile dementia has been heavy. There is still a long list of female patients awaiting admission. Provision has been made for the supervision of these patients in their own homes by regular visitation of the District Medical Officers and Health Visitors who report regularly on the urgency of each case and on the development of any untoward symptoms necessitating their removal to hospital as a matter of urgency. One of the visiting psychiatrists to the Psychiatric Unit at Stobhill Hospital, Dr. I. M. Sclare, draws attention in his report to the unprecedented difficulty in getting certified patients removed to mental hospitals.

Dr. A. D. Briggs, Medical Superintendent, Stobhill Hospital, in discussing the administrative difficulties of the Unit suggests that "the work of this department will be hampered as long as cases are admitted into the individual wards. The Unit will only be able to function satisfactorily when the eight wards are under one chief with the necessary assistants and the individual wards can be used to segregate patients." These suggestions are receiving most careful consideration and every effort will be made to enable the Unit to function with the greatest efficiency.

Dr. Alexander Dick, Medical Superintendent, Hawkhead Mental Hospital and Visiting Psychiatrist to the Psychiatric Unit at Southern General Hospital reports on the Psychiatric Unit as follows :—

"The past year has shown no abatement in the pressure of work in this Unit indicated in the statistical tables by the increase in numbers admitted to the wards and the increased attendances at the Out-Patient Clinic. These figures have not to be taken as due wholly to an increased incidence of nervous and mental illness in the general community. Other factors have contributed, one of the chief being the more informed recognition of nervous and incipient mental disorders and of the functions of the Psychiatric Clinic by medical practitioners and the general public. In addition, cases in increasing numbers from the Western Infirmary, Royal Infirmary and the Lansdowne Psychiatric Clinics are being referred to us for special treatments. Our contacts with Social Service bodies and Probation Officers are becoming more frequent and generally there has been a marked increase in the activities of the Unit.

Attendances at the Out-Patient Clinic have become so heavy that it was found that one morning weekly was not sufficient to cope with the work and out-patients are now seen at the wards on other two mornings weekly. In this connection we have introduced a system of appointments and this arrangement is working satisfactorily and is appreciated by the patients and their relatives.

Many beds continue to be occupied by patients exhibiting the mental and physical deterioration associated with old age, the chronic psychotics and the feeble-minded. In addition to care and supervision many of them require experienced and time-consuming nursing and these necessary duties interfere and hinder the treatment of the acute and recoverable cases.

*Treatment.*—Our methods have kept pace with modern ideas and standards and our results can be considered as most satisfactory. The value of occupational and recreational therapy is now fully recognised and more attention is being devoted to this form of treatment. The mental and physical fitness of the up and convalescent patient has benefited accordingly. Malarial Therapy, Prolonged Narcosis and Electrical Convulsant Therapy are now established as routine treatments. We had to discontinue Insulin Shock Therapy, popular in some hospitals for the treatment of Schizophrenia, owing to the lack of experienced medical and nursing staff, but it is our experience that we obtain as good results with other methods of treatment for this mental disorder. No attempt has been made to treat any of our patients by Pre-frontal Leucotomy as we are rather conservative in our opinion of this method which we consider experimental and dangerous.

The lack of accommodation and inadequate facilities in the female wards have been mentioned in previous reports.

The out-patient clinic requires larger premises with better waiting room accommodation. Generally patients suffering from nervous and mental illness are not comfortable in their association with those attending other clinics. The male and female wards, their offices and the out-patient clinic should be in a self-contained block and such an arrangement would avoid duplication of certain therapeutic equipment."

In the tables following will be found the more important details of the admissions, discharges and deaths for the year 1945.

SHOWING NUMBERS ADMITTED TO GLASGOW MENTAL HOSPITALS AND THE CHANNELS THROUGH WHICH THEY WERE ADMITTED DURING THE YEAR 1945.

	Hawkhead.		Woodilee.		Stoneyetts	
	M.	F.	M.	F.	M.	F.
Observation Wards ... ..	31	23	12	14	5	7
Home, Police Stations, Infirmary, etc.	10	25	3	14	—	9
Transferred from other Asylums or Certified Institutions ... ..	5	1	3	1	1	1
H.M. Prisons ... ..	40	7	34	11	18	2
Totals ... ..	<u>86</u>	<u>56</u>	<u>52</u>	<u>40</u>	<u>24</u>	<u>19</u>

FORMS OF MENTAL DISORDER IN THE ADMISSIONS, RECOVERIES AND DEATHS IN THE MENTAL HOSPITALS DURING 1945.

INHERENT DEVELOPMENTAL DEFECTS—	Admissions.			Recoveries.			Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Mental Deficiency—									
(a) Idiocy ...	—	—	—	—	—	—	1	—	1
(b) Imbecility ...	1	—	1	1	—	1	—	2	2
(c) Feeble-mindedness ...	12	3	15	—	1	1	—	1	1
(d) Moral Imbecility ...	12	2	14	7	1	8	—	—	—
Epileptic Insanity ...	15	7	22	6	—	6	7	2	9
Schizophrenia—									
(a) Simple ...	26	21	47	8	5	13	11	3	14
(b) Hebephrenic ...	10	9	19	2	1	3	3	2	5
(c) Katatonic ...	5	3	8	—	1	1	1	6	7
(d) Paranoid ...	15	6	21	5	1	6	2	2	4
Paraphrenia ...	11	7	18	3	4	7	5	2	7
Paranoia ...	—	4	4	—	2	2	—	2	2
Psychoneuroses—									
(a) Neurasthenia ...	1	2	3	—	—	—	—	—	—
(b) Psychasthenia ...	1	—	1	2	1	3	—	—	—
(c) Hysteria ...	1	—	1	—	—	—	—	—	—
(d) Neurosis ...	—	—	—	—	—	—	—	—	—
TOXIC AND CONFUSIONAL PSYCHOSES—									
Manic Depressive Psychosis ...	34	30	64	12	29	41	12	7	19
Acute Delirium ...	—	—	—	—	—	—	—	—	—
Acute Confusion ...	5	5	10	5	2	7	—	—	—
Stupor ...	—	—	—	—	—	—	—	—	—
Exhaustion Psychosis ...	—	—	—	—	—	—	—	—	—
Alcoholic Insanity—									
(a) Delirium Tremens ...	—	—	—	—	—	—	—	—	—
(b) Mania a Potu ...	—	—	—	—	—	—	—	—	—
(c) Korsakoff's Psychosis ...	—	—	—	—	—	—	—	—	—
(d) Chronic Alcoholic Insanity ...	9	2	11	4	—	4	4	1	5
Cocaine, Morphine, and other Drug Insanities ...	—	—	—	—	—	—	—	—	—
Involuntary Psychoses ...	2	11	13	2	4	6	—	3	3
ACQUIRED DEFECTS—									
Pre-Senile Psychosis ...	—	7	7	1	1	2	—	1	1
Senile Dementia—									
(a) Simple ...	5	5	10	1	—	1	6	16	22
(b) With Mania ...	5	5	10	—	1	1	4	2	6
(c) With Depression ...	—	2	2	—	—	—	2	2	4
(d) With Presbyophrenia ...	—	—	—	—	—	—	—	—	—
General Paralytic Dementia ...	4	4	8	1	1	2	4	4	8
Traumatic Dementia ...	1	—	1	1	—	1	—	—	—
Organic Dementia—									
(a) Tumour ...	—	—	—	—	—	—	—	—	—
(b) Gumma ...	—	—	—	—	—	—	—	—	—
(c) Arterio-sclerosis ...	5	7	12	—	—	—	5	7	12
(d) Meningitis ...	—	1	1	—	—	—	—	—	—
(e) Encephalitis ...	3	4	7	—	2	2	2	1	3
(f) Other Cerebral Diseases ...	—	—	—	—	1	1	—	—	—
(g) Huntington's Chorea ...	—	—	—	—	—	—	—	—	—
Psychopathic Personality ...	1	—	1	—	—	—	—	—	—

PSYCHIATRIC UNITS IN GENERAL HOSPITALS.

	Stobhill.		Eastern District.		Southern General.		Total.	
	M.	F. Total.	M.	F. Total.	M.	F. Total.	M.	F. Total.
Remaining at 31st December, 1944	104	128 232	26	29 55	83	14 97	213	171 384
Admitted during 1945	362	287 649	53	55 108	681	122 803	1,096	464 1,560
Number treated	466	415 881	79	84 163	764	136 900	1,465	635 1,944
Number discharged Home or transferred to Poorhouse	217	157 374	43	24 67	504	81 585	764	262 1,026
Number Died	115	96 211	9	18 27	98	6 104	222	120 342
Number removed to Asylum	32	33 65	4	12 16	59	35 94	95	80 175
Number remaining at 31st December, 1945	102	129 231	23	30 53	103	14 117	228	173 401

ADMISSIONS, DISCHARGES AND DEATHS IN THE MENTAL HOSPITALS DURING 1945.

	Gartloch.		Woodilee.		Hawkhead.		Stonycyets.		Total.	
	M.	F. Total.	M.	F. Total.	M.	F. Total.	M.	F. Total.	M.	F. Total.
On Register at 31st December, 1944	54	74 128	685	630 1,315	686	559 1,245	140	138 278	1,565	1,401 2,966
Number of Cases admitted during the year	51	60 111	52	40 92	86	56 142	24	19 43	213	175 388
Total Cases under care during the year	105	134 239	737	670 1,407	772	615 1,387	164	157 321	1,778	1,576 3,351
Cases discharged and Died during the year—										
Recovered	—	—	21	15 36	38	36 74	3	7 10	62	58 120
Not Recovered	—	—	18	10 28	13	1 14	3	3 6	34	12 46
Died	—	—	30	31 61	29	29 58	8	6 14	67	70 137
Transferred to other Institutions in Scotland and boarded out in private dwellings	1	1	8	7 15	4	11 15	—	1 1	12	20 32
Total Cases discharged and Died during the year	—	—	77	63 140	94	72 166	14	11 25	185	155 340
Total Cases on Register at 31st December, 1945	105	128 233	660	607 1,267	678	543 1,221	150	143 293	1,593	1,421 3,014